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ON A PECULIAR FORM OF SCLEROTITIS.

By R. HIBBERT TAYLOR, M.D., Surgeon to the Liverpool Eye and Ear Infirmary; and Lecturer on Ophthalmic Medicine and Surgery in the Royal Infirmary School of Medicine.

In the first volume of the *Edinburgh Medical Journal*, I published an account of a peculiar form of sclerotitis which during the few preceding years had occasionally come under my observation. My attention was first drawn to it by some remarks of Mr. Dalrymple upon the subject, in his beautiful and artistic work upon the *Pathology of the Human Eye*. The disease is remarkable in many respects; and from its slow and insidious approach, obstinate character, tendency to return, and the detriment which it inflicts upon the powers of vision, not devoid either of interest or importance, especially to those who make diseases of the eye a special subject of study. The disease in question does not appear hitherto to have attracted much attention among ophthalmologists, in this country at least; and I have not met with any notice of it in the systematic treatises which seemed to give a true and faithful description of its appearance and progress. Under the head of "Scrofulous Sclerotitis," Dr. Mackenzie gives the details of an inflammatory affection, which in its early stages bears a considerable resemblance to the disease we are about to consider, but in its further progress it differs widely from it, being attended with staphyloma of the choroid, and an amount of disorganisation of the internal tissues of the eyeball, to which I have never seen any approach in this milder though still formidable complaint.

Since the publication of the paper above alluded to, several additional examples of the disease have fallen under my notice, and I am therefore induced to lay before the profession a short *resumé* of the sum of our knowledge as to its symptoms, pathology, and treatment.

In sketching this outline, I cannot, of course, altogether avoid repeating myself to a certain extent; as to many of the remarks already made, I have nothing to add, but this is, perhaps, of less consequence, as comparatively few are likely to be familiar with the subject; and, on the other hand, the additional experience which has been subsequently gained, will enable me either to confirm or modify opinions formerly advanced.

The disease seems to consist, as I think Mr. Dalrymple correctly observes, in a primary circumscribed inflammation of the sclerotica, which tends to spread *outwardly* to the subconjunctival cellular tissue, and *inwardly* to the structure of the choroid and corpus ciliare. It is attended with the deposition of a whitish matter, probably tubercular, in the tissues above named; and at a more advanced stage of the disease, the cornea is apt to become the seat of opacities varying in size and density. The attendant vascularity occurs in detached patches, assuming somewhat of the fascicular form observed in pustular conjunctivitis, and is generally seated on the upper and outer side of the cornea towards the external canthus.

The larger trunks subdivide into numerous smaller twigs at a short distance from the margin of the cornea, enclosing an area of a circular or ovoid figure; within this space several conical-shaped bodies are seated, separate from each other, of reddish colour at the base, and white or yellowish-white at the apex. They are of firm consistence, and evidently connected with the subjacent tissues, as they cannot be moved with the finger. The textures surrounding them are generally somewhat thickened and elevated; and the appearance is not unlike what we might suppose to arise from the deposition of some solid matter in the substance of the sclerotica and subconjunctival cellular tissue. The cornea is usually, though not always, the seat of some opacity. These opaque patches vary in form, extent, and density. They generally occupy the side of the cornea nearest to the thickened sclerotica, and are either separated from it by a clear strip of cornea, or, as more frequently happens, are united to it; presenting the appearance as if the opaque texture of the sclerotica had advanced upon the cornea. In some instances, where this union was only partially developed, minute red vessels could be distinguished, running apparently upon the internal surface of the cornea, and extending from the thickened portions of the sclerotica and corpus ciliare towards the corneal opacity.

In one instance, and only one, I have observed the cone-shaped bodies ulcerate upon the apex and discharge their contents through the aperture there formed. This process was followed by rapid sinking of the elevations, and a marked decrease in the surrounding vascularity.

The movements of the *pupil* are usually sluggish, or almost wholly suspended, in the early stage of the disease; and at a more advanced period, it is apt to become irregular, and displaced from its central position toward the seat of the disease in the sclerotica.

Pain is of a variable character, being usually slight in degree, sometimes amounting only to a sensation of tenderness on pressing the eyeball, or a feeling of stiffness on rolling it from side to side, or in exercising the eye much by artificial light. In other instances, again, the pain is more marked, consisting of a darting sensation in the eyeball itself, with sharp lancinating flashes extending upwards to the eyebrow and side of the head, and down along the side of the nose to the chin.

Vision, in general, is impaired to a greater or less degree. Where opacities to any extent exist upon the cornea, it must, of course, be imperfect; but independently of this, it is usually defective, and liable to become more so when the eye is used for any length of time. In one case recently seen, the patient stated that all objects appeared for a time of a bluish cast, which was followed by the sudden appearance of flashes of light of a reddish colour.

Watering of the eye generally accompanies this defective state of vision, and is increased by anything which tends to promote vascular congestion, as walking against a wind, or exerting the eye in looking at minute objects.

With regard to the persons most liable to attacks of this disease, it seems to affect females more frequently than males, usually young adults, and those especially of a strumous habit. One eye is usually attacked rather than both, although it may appear alternately in each; and when one is the seat of the disease, it may affect both sides of the eyeball simultaneously, or commencing on one side of the cornea, may gradually travel round its entire circumference, disappearing in one spot as it is developed in another.

One of the most characteristic features of the disease is its chronic obstinacy. Its first development is generally slow and insidious. Commencing with slight redness in one portion of the eyeball, which is at first intermittent, moderate lacrymation, and some uneasiness occasionally amounting to pain, and varying dimness of sight, it gradually steals on, till at length the patient becomes conscious that there is something materially wrong with his eye, from observing an opaque spot upon the cornea, or finding that he can no longer use the organ as before.

So much is this the usual subtle course of the disease, that

we not unfrequently find, on close examination, that its commencement dates several months previous to the time when the patient first applied for medical advice. Of eleven cases, minute details of which I have preserved, three occurred in males, and eight in females. Their ages ranged from fifteen to sixty years, seven out of the eleven being under thirty-one. In all of these instances, with a single exception, the disease was confined to one eye only; affecting the right eye in six cases, and the left in four. In eight instances, it was confined to one side only of the eye attacked, and that generally the inner; and in three, it affected both sides of the cornea. The disease attacked the eye for the first time in eight cases, for the second time in one, for the third in one, and for the fourth in one; while the duration of the attacks in these different instances varied from three weeks to four years.

With regard to the intervals of time which elapsed between the different accessions of the disease in those who suffered more than one attack, and the season of the year when they occurred, it may be observed that, in the person who suffered two attacks, the first occurred in April, and the second in November of the same year. In the case of the three attacks, the first occurred in the winter of 1854, the second in the winter of 1855, and the third in the autumn of 1858; while the patient who suffered four attacks was affected first in March, and second in October, 1853; for the third time, in July 1858, and finally in May 1859.

As regards the immediate cause of this disease, I have nothing very definite to state. Seven out of the eleven cases occurred in persons whose general health was more or less disordered at the period of the attack, and one of these suffered likewise from otorrhœa. In one instance, it was attributed to exposure to cold; and, in another, the symptoms were said to have been aggravated from a similar cause; while in two examples no cause was apparent, or could be assigned. Upon the whole, I think we may regard this disease as furnishing another example of those many and various local affections which date their origin from constitutional causes, and which must be looked upon as indicating an unhealthy condition of the system at large.

The only other ophthalmia with which this form of disease may be confounded, and it is a mistake not likely to be made by any one familiar with the pathology of the eye, is pustular inflammation of the conjunctiva. Both occur in young adults, and both are characterised by a fascicular arrangement of blood-vessels occurring in detached bundles, and running towards and subdividing around a common centre. In pustular ophthalmia, however, the point of attraction is a pustule or vesicle, seated in the conjunctiva, and in some degree moveable with this membrane; generally of a rounded figure, with a flattened apex, and either filled with a semi-opaque fluid, or, at a more advanced stage, forming a shallow ulcer. These appearances are very unlike the firm, immoveable cone-shaped body, seated upon a dense thickened base, and described as characteristic of the disease under consideration. Pustular ophthalmia, in addition, is rarely accompanied with dense opacities upon the cornea, or with any indication of inflammatory action in the tissues of the sclerotica, iris, and choroid, such as we see in the other form of disease.

From what has been already said with regard to the development and progress of this affection, it will readily be understood that the prognosis is not likely to be of a very cheerful or encouraging character. In any case, the improvement is likely to be slow, and the more so in proportion as the disease has existed for a longer period. When the disease is limited mainly to the sclerotica, and to the tissues immediately above and beneath it, we may anticipate a return to health under appropriate treatment; but, should the cornea have become the seat of large and dense opacities, and if, as may be anticipated in such circumstances, the textures of the choroid and corpus ciliare are also implicated, the result, under any treatment, is not likely to be so favourable; and, should we succeed in arresting the progress of the disease, the eye will probably remain permanently altered* in structure, and vision more or less impaired.

With a few remarks upon the mode of treatment which I have found most successful, I shall conclude this paper. Judging from the inflammatory character of the disease, and the congested condition of certain tissues of the eyeball which usually exists, we might naturally anticipate benefit from the abstraction of blood, at least locally. I have not, however, seen it do any good even when apparently most indicated; but, on the contrary, the practice seemed rather to be injurious. General depletion would not be thought of, as the tone of the patient's system is more frequently below than even at the level of sound health.

Mercury exercises a decided control over the disease; it should be given in small doses, and cautiously introduced, so as gradually and mildly to affect the mouth. From the extremely chronic and obstinate character of the inflammation, it may be necessary to keep up the action of the remedy for some time; and, in so doing, we must take care that the patient's system does not sink too low, as is apt to occur. Any indication of this nature must be met by a more nutritious diet, and the addition of a tonic to the mercurial. Counter-irritation by blistering is of the greatest service; and additional experience has only tended to increase my estimate of its value. In severe cases, it is better to delay its employment till the inflammatory symptoms have been somewhat mitigated by the action of mercury, when it may be commenced with good effect. In milder instances, I have found the operation of the blister alone sufficient to cause the gradual disappearance of the disease. The most convenient place to apply it is the temple, especially in females, where it is concealed by the hair; and I think, besides, that it is more efficacious in this situation than when put behind the ear. In size it need not exceed that of a penny-piece. A free discharge should be maintained from it during several weeks, if necessary (and it generally is so); and, to effect this, I have found Albespeyre's blistering-paper, No. 2, the most effectual, the cleanest, and most convenient application. After the cuticle has been raised by a fly-blister, and carefully removed, the raw surface should be dressed with the paper at least twice daily.

Stimulating collyria of all kinds are injurious, while those of a milder character are productive of little if any good. Poppy decoction, used tepid, or tepid water alone, will answer every purpose to be gained by a local application of this kind. If the pupil inclines to contract unduly, or if we apprehend any risk of the iris adhering to the capsule of the lens, the extract of belladonna may be added to the lotion with which the eye is bathed.

Pain in the eyeball, or in the surrounding bony parts, if much complained of, will probably be relieved by rubbing the extract of belladonna into the temple and eyebrow, or by a similar use of strong mercurial ointment combined with powdered opium, in the proportion of three parts of the former to one of the latter. The last named preparation I have found to be of much service in giving relief from circumorbital pain.

Entire rest of the eyes—of both eyes, I may remark—is quite indispensable when the disease is at all severe; and they should be defended from the glare of light by the use of a broad green or blue shade, or by glasses of a pale blue or neutral tint. In milder cases, we must enjoin a cautious and not prolonged employment of the eyes—a restriction which it will be found difficult to enforce in many instances; and, to obviate in some measure the injury which imprudence is likely to occasion, we may recommend the use of coloured glasses of a large size, and, in females, the addition of a thin blue veil on going out of doors.

Attention to the general health is a point never to be lost sight of in the treatment of this disease, for it will be found almost invariably to be more or less deranged; and the constitutional indications of this disorder must not be overlooked. Regulation of the diet, and of the general habits of the patient, is of much importance. The exhibition of tonics, as iron or quinine, will often be required, especially if the disease continues to linger; and, in any circumstances, I have generally found a sustaining and nutritious diet to be of service, rather than one of an opposite character.

Finally, the entire duration of treatment in these cases was as follows: in one, two weeks; in one, four weeks; in two, six weeks; in one, two months; in two, four months; in one, five months; in three, the period of treatment is not recorded; and one, when last seen, at the expiration of four months from the commencement of the disease, was still far from well.

In conclusion, I may add, that instances of this disease are occasionally to be met with, which will baffle all our efforts for their removal. In such circumstances, probably more benefit will be derived from frequent change of air by land travelling, than from any other treatment which we could recommend. I have met with at least one case in which a cure was effected by this means.

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* In seven out of eight cases, vision was not ultimately impaired beyond slight dimness, accompanied with irritability of the eye, and inability to use it in reading or writing, except for very short periods. In the other case, the sight was never very defective, and ultimately became good.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASE OF ACUTE PHTHISIS.

Under the care of James Russell, M.D.

[*Clinical Clerk*—Charles Walls, Esq.]

John Smith, aged 28, axle-forger, was admitted July 11th, 1859. He states that he has not been a "drinking man"; he has never had short breath, and has not been subject to coughs; he has never had rheumatism, nor swelling of the feet. His parents are both dead, his mother of dropsy; he does not know that any of his relations have died of consumption. He has usually worked about twelve hours in the day. He was ill six or eight weeks ago with a rash, and was very sore in the mouth. His present illness commenced on June 28th, when he caught cold, occasioned, as he believes, from working in wet clothes. He complained of cold and shivering, and was very sick; his breathing was "very bad" from the first. He made a great deal of water, and it was of a very high colour. He had expectoration, very tenacious, "whitish, reddish, and yellowish"; it contained some blood. He has not had any pain in his side.

Present State. He is much exhausted with his ride of three or four miles. Pulse 105; respiration 46. There is small crepitation over the entire right side of the chest, especially over the right lower lobe; some prolonged expiration on the left side posteriorly. He was ordered to have a turpentine stupe applied to the right side.

℞ Misturæ salinæ ʒviij; tinctur. opii ʒj; antimon. potassio-tart. gr. ½. M. Fiat mistura: sumat ℥j 4tis horis.

July 12th. Pulse 112; respirations 46. He is much prostrated, but his intellect is perfectly clear. The tongue is clean and moist. He has sweated considerably. His urine is abundant; it is deep coloured, acid, of specific gravity 1014. It is merely dimmed by nitric acid, and contains a few epithelial casts. There has been a very little "white" expectoration. There is dulness in the right subclavian space; but, with this exception, there is no marked dulness in any part of the chest. Coarse crepitation is universal throughout the right lung; on the left side in front, there is rhoncus; posteriorly, the respiration is nearly pure. The stupe was repeated.

July 13th. Pulse 150, very soft; respirations 48. He has no cough nor expectoration. He is much exhausted; his skin is hot, and he perspires much. The urine is copious, clear, and light coloured. The bowels were moved yesterday afternoon. Bronchial breathing, to a small amount, is audible beneath the right clavicle; there is creaking and some crepitation throughout the left chest. The sounds of the heart are perfectly masked by the respiratory murmurs.

℞ Ammoniæ sesquicarbonatis ℈ij; ætheris chlorici ʒiij; mucilaginis ℥ij; aquæ puræ ℥vj. M. Sumat ℥j 3tis horis.

℞ Pulv. ipecac. co. ℈ss. Ft. pulvis nocte maneque sumendus.

A blister, six inches by five, was ordered to be applied to the right side. Three glasses of wine were ordered to be given daily.

July 14th. The pulse varies between 108 and 116; respirations 48. The tongue is moist. He has some sordes on his teeth. The hands are tremulous. He has slept, but moaned much. He has taken beef-tea. He has slight cough, with scanty expectoration of grey mucus. The result of the examination of the urine did not vary from that reported on the 12th. There is decided dulness under the right clavicle to the upper edge of the fourth rib; posteriorly, the right side is rather more dull than the left. Bronchial expiration is heard over the dull space in front. There is crepitation throughout the entire right chest, particularly coarse at the base; to a much less extent throughout the left chest also.

July 15th. He is much prostrated, and dull; he has twice thrown over his pot, and broken it. The arms are tremulous; the voice feeble and tremulous; but he takes his food. He wanders somewhat in his talk. There is no expectoration. Respirations 40.

Sumat pulveris ipecac. comp. ℈ss omni nocte.

A blister, three inches by four, was applied to the infraclavicular region.

[The subsequent notes were dictated by Dr. Maxwell, the house-physician, in Dr. Russell's absence from town.]

July 18th. The dulness on the right side has much extended. Diarrhœa is present.

℞ Mist. cretæ cum opio ʒviij. Sumat ℥j 4tis horis.

July 21st. He talks much in his sleep, but is quite rational when awake. Diarrhœa continues. He takes his food well.

July 22nd. Pulse 132. There is absolute dulness over the whole right side; the breathing, from apex to base, is intensely bronchial, with crackling and crepitation. On the left side, there is absence of dulness, but sibilus and crepitation over the apex of the lung.

℞ Vini antimon. tartrat. ♏xx; tinct. comphoræ comp. ʒj; spiritûs æther. nitr. ʒss; liquoris ammoniæ acet. ʒj; aquæ ℥j. M. Fiat haustus 3tiis horis sumendus.

He gradually sank, and died on the 26th.

Sectio Cadaveris twenty-four hours after death. The right side of the chest contained a pint and a half of fluid; the pleural surfaces were covered at many points with very recent plastic exudation. The right lung was of enormous volume, and was divided into five distinct lobes; it had the characters of a lung distended with firm injection, and crepitated nowhere from apex to base. The entire organ was occupied with grey tubercular matter, arranged in masses of about one sixth of an inch in diameter, surrounded with a rim of reddish tissue. In some parts the tubercular matter constituted masses an inch in diameter. At one or two points near the apex softening had commenced. No fluid exuded on compressing the lung. The left lung was extremely congested and œdematous throughout, with patches of tubercular deposit scattered very sparingly through its tissue. The kidneys were large; they weighed, together, fifteen ounces. The spleen and liver were large; but free from tubercle.

Remarks. This case is interesting from the rapidity with with which so copious a deposit of tubercular matter was effected. The entire duration of the disease, from the period of the initiatory rigor, was twenty-nine days, and yet the whole of one lung was filled to distension with tubercular matter.

Dr. Blakiston (*Diseases of the Chest*, p. 315) states that in three only of twenty cases of acute phthisis did death take place in less than five weeks from the appearance of the first symptoms.

As we were able to trace the progress of the disease by means of physical examination, there is every reason to believe that the greater part, if not the whole, of the deposit took place during the month preceding the patient's death. Unfortunately, it was impossible to obtain a full report of his previous health; but his own account, so far as it went, rather tended to exclude the idea of pre-existent disease in the chest.

The deposit was almost exclusively confined to one lung, a circumstance particularly noteworthy in connection with its great abundance.

The very subordinate character of the ordinary symptoms of cough and expectoration is worthy of especial observation; the more so as abundant crepitation was present throughout the duration of the illness; this circumstance partly explains a similar occurrence in certain cases of asthenic pneumonia.

Possibly, the very dull and prostrate condition of the patient may afford some explanation. This symptom was so prominent as to create an uncertainty whether he was not the subject of fever.

WEST DERBY UNION HOSPITAL.

CASE OF EXCISION OF THE PATELLA.

Under the care of Edward Lister, Esq.

Michael Small, aged 59, a sailor, was admitted into the above Hospital on February 10th, 1859, suffering from caries of the patella. In December 1858, he fell against a brass plate in the fore-hatch of a vessel; the skin was broken, but the bone was not laid bare. About a week after the accident, he unfortunately got it burnt when sitting before the fire and falling asleep.

On his admission, there was a large wound extending, about five inches in circumference, around the patella, accompanied with great pain; the whole of the bone being in a carious condition, the capsular ligament of the joint was opened, so that a

probe could be passed with ease into the joint, there being at the same time an extensive puriform discharge mixed with synovia.

On March 4th, with the assistance of my friend Mr. Waters, I excised the bone, the patient being under chloroform. The interior of the joint was found to be extensively exposed. The leg was placed on a double inclined plane slightly flexed; water dressing was applied. The wound granulated rapidly; the discharge became healthy; the synovial effusion gradually diminished; and what slight pain existed, had on the 18th entirely ceased. His general health rapidly improved; and on June 7th, the wound had quite healed.

The splint which he had worn was discontinued on July 1st, when he had a very partial use of the joint, which improved; and on the date of his discharge (July 4th), he was able to walk, comparatively speaking, well, without the assistance of a stick; the only support afterwards used was an elastic knee bandage.

MIDDLESEX HOSPITAL.

TWO CASES OF INJURY OF THE HEAD: RECOVERY.

Under the care of A. Shaw, Esq.

The notes of the following cases were taken by Mr. Brend, a pupil of the Hospital.

Case I. *Depressed Fracture of the Skull, with Concussion.* Sarah Copping, aged 16, a remarkably strong, healthy, and well developed girl, was brought to the Hospital at half past eleven o'clock on the night of January 3rd, 1859. She had sustained injuries from the falling of a large stone staircase, crowded with people, at the Polytechnic Institution, the accident having just happened. Her condition was as follows. She was quite insensible, and in a state of collapse; the general surface was cold and pale. The pulse was 58, feeble; the pupils were contracted, and nearly motionless; the limbs flaccid. She did not reply to questions, and lay as if unconscious. There was rather free hæmorrhage from both ears. On examination, the skull was found to be fractured in the situation of the posterior superior angle of the left parietal bone, a portion of which, of about the size of a florin, was depressed; and there was a small wound of the scalp at the same spot, from which blood flowed rather freely. Immediately after admission, she vomited a considerable quantity of dark coloured clotted blood. Her hair was ordered to be cut close; the wound to be covered with lint; and a turpentine injection to be given immediately.

Jan. 4th, 9 A.M. Vomiting has been frequent during the night, and continues at longer intervals this morning. More blood was ejected with the first two or three vomitings, but none latterly. The turpentine injection came away soon, bringing very little fæcal matter and no blood. The hæmorrhage from the ears has ceased. The skin has recovered its warmth; the breathing is calm, without stertor; the pupils are still contracted. Pulse 65, slowly regaining its strength. She lies in a quiet condition in the intervals of the vomiting, apparently unable to speak, but evidently not unconscious, for she moves when touched, and manifests some discomfort on exposure of the body. She was ordered to have six grains of calomel immediately, and to have a spirit lotion applied over the whole head.

1 P.M. The general symptoms continue much the same. She has passed no urine since admission. There is no action of the bowels. A compound senna draught was prescribed, to be taken immediately; and two grains of calomel, with one-sixth of a grain of tartar emetic, every four hours. The lotion was continued to the head.

10 P.M. She passed in the afternoon about two pints of dark amber-coloured urine. She was apparently sensible of the distension of the bladder, but emptied it only on being asked to do so. The degree of insensibility is but little diminished, but there is more restlessness. She makes no attempt to reply to questions. The pulse has risen to 70, somewhat fuller, but still weak and easily compressed. There is no undue heat about the scalp. She has had no vomiting for the last four hours.

Jan. 5th, 9.30 A.M. She has been restless during the night, and vomited slightly once. She is quiet this morning. She answers questions slowly, but is still much confused. When asked, she says she has pain, and puts her hand to the forehead. There is no preternatural heat of the scalp; the general surface is warm and soft. Pulse 80, moderately full, and readily compressed. The tongue is moist, with a thin white coating along the centre of the dorsum; it is red at the margins and at the tip. The gums have been slightly reddened by the calomel. There is no action of the bowels. She passed urine again at seven o'clock this morning. She was ordered to have a common enema immediately, to continue the powders every six hours, and to continue the lotion to the head.

10 P.M. She is more restless, frequently turns in bed, and occasionally sighs deeply. The countenance is rather flushed; the skin is warm, but not harsh. Pulse 90, with slight hardness. The bowels have acted once; the motion was dark coloured, and tolerably copious.

Jan. 6th. She has been very restless during the night, with occasional wandering; but is quiet this morning. She answers questions readily and coherently. She does not complain of pain, except when asked, and then only in the forehead; there is no pain at the seat of the fracture, but merely tenderness on pressure, with some heat and tumefaction of the scalp. The pupils are natural; there is no distortion of the features. Pulse 86; tongue moist. There is some thirst. She takes only milk and water, and occasionally a teaspoonful or two of gruel. The gums are a little puffed. She sleeps quietly at intervals.

1 P.M. As there had been no action of the bowels since yesterday afternoon, Mr. Shaw ordered a castor oil enema to be administered immediately. The powders were continued as before.

10 P.M. She has gone on well through the day; but this evening there is again some excitement manifested by frequent turning in bed and wandering at intervals. The head feels hot. Pulse 98, oppressed. The bowels have been moved by the injection; the motion contains much dark coloured and slimy matter, but no blood.

January 7th, 10 A.M. She has been restless through the night, wandering at intervals, but without decided delirium; no attempts to get out of bed. She slept quietly at times. To-day she complains more of pain in the forehead. There is no pain in the occiput. The tumefaction over the seat of fracture has diminished; but there is still much tenderness of the scalp here when touched. Pulse 98, still rather oppressed. The tongue is moist, covered with thick white coating. The bowels acted this morning. The urine is tolerably copious, and not high coloured.

1 P.M. The gums are more tender, with some mercurial fœtor of the breath. She complains much of tenderness about the lower part of the back and nates, which seems to be due only to bruising. The pain in the forehead continues. She was ordered to be placed on a spring bed, to have a blister applied to the forehead, and to take the powders night and morning.

10 P.M. She has dosed much at intervals through the day. Her sleep has been more disturbed during the last two or three hours; she wakes often, and talks at random. She does not complain of pain from the blister. Pulse 100, less easily compressed. There is more heat and dryness about the head, and of the surface generally. Thirst is considerable. She takes only milk and water.

Jan. 8th, 10 A.M. Her sleep was much disturbed during the first half of the night, but she was more composed towards the morning. She answers questions readily and correctly to-day. The pain in the forehead continues, the blister having risen but slightly. There is no deafness nor tinnitus aurium; no vomiting. The tongue is moist, thickly coated. The bowels acted last night, and again this morning; the motions were dark-coloured and slimy. She complains of some tenesmus.

1 P.M. The scalp is decidedly more hot; the integument of the face, and of the body generally, is also hot and dry to the touch. The pulse has risen to 115; full and with difficulty compressed. One-sixth of a grain of tartar emetic was prescribed, to be taken in a draught every six hours.

10 P.M. The bowels have acted freely once since last visit. The inflammatory symptoms have not increased, the pulse having again gone down to 110. There is no increase of pain in the head; no delirium nor coma. She sleeps quietly at intervals. The mixture does not produce vomiting.

Jan. 9th. She has passed a favourable night, having slept continuously for several hours. There is less heat about the scalp; no particular tenderness over the seat of fracture; the pain in the forehead is diminished. She complains most of pain in the back and loins. The catamenial discharge has just come on. The tongue is as yesterday. Thirst is still considerable. The bowels are free. Pulse 100, smaller, and more easily compressed. Her countenance is less flushed.

Jan. 10th. She has passed a favourable night. Her counte-

nance is natural; the skin is moderately warm, not harsh nor dry. She has little or no pain in the head; but there is still some tenderness over the seat of the fracture when touched. The tumefaction of the scalp is nearly gone. The tongue is cleaning; the gums are less tender; the bowels are free. The draught was continued three times a day; and she was allowed to have milk and barley broth.

Jan. 11th. She has passed a favourable night, and looks cool and comfortable to-day. She complained for the first time of pain about the left shoulder; and, on examination, Mr. Shaw found a fracture of the clavicle near the acromial end. There was some displacement; but by means of a good pad in the axilla, and bandages to support the elbow and keep it close to the side, fair apposition of the fragments was still procured. Her sister states that she inquired to-day for the first time how she came to be in the hospital; and, on being asked, she says that she has no recollection of any accident having occurred, or that she went to the Polytechnic Institution at all. She has, however, distinct recollection of occurrences which took place the day preceding. The pulse is now 95; her appetite returning. She took bread and milk for breakfast.

Jan. 12th. She is doing well; she slept comfortably the greater part of the night. She is free from pain except in the shoulder, and here it is not severe. The tongue is moist, cleaning. Thirst is much diminished. Pulse 78, soft. The draught was ordered to be taken twice a day only, and was omitted altogether on the following day.

Jan. 16th. Steady improvement has taken place since the 12th. She complains of no pain, except in the shoulder, on turning in bed. The fracture of the clavicle is becoming consolidated; the bandages have been readjusted. There is no pain nor tenderness of the scalp over the seat of the fracture. The bone is but slightly depressed, and feels merely like an indentation. She takes her broth and pudding with a good appetite; no medicine is administered.

Jan. 19th. She is doing well, is cheerful, and sits up in bed a good part of the day. Her appetite is good. Pulse 75, and improved in strength; the tongue dry and clean. Strong beef-tea and pudding were allowed.

Jan. 22nd. She was allowed to be out of bed. She says she has a little pain in the forehead, but only such as she had been accustomed to have before the accident. Pulse 70; skin cool.

Jan. 24th. She has sat up for some hours each day, and is in every respect doing well. Mr. Shaw has given permission for her removal to her own home to-morrow.

Jan. 25th. She was removed to day in an invalid bed, complaining of nothing but a feeling of weakness.

Jan. 26th. She was visited at her house by Mr. Shaw. She had slept soundly the whole night, and was free from pain in the head. Pulse 68; skin cool.

This patient was seen recently by Mr. Shaw. On careful examination of the head, the contour of the skull was seen to be still uneven, testifying to the reality of the depression of bone, about which there had at one time been some doubt, owing to the extensive ecchymosis. She continued to be impaired in her memory.

Case II. *General Concussion; Free Hæmorrhage, followed by copious serous-looking Discharge from the Left Ear, without symptoms of Compression.* Catherine Woodrow, a healthy looking young woman, aged 22, was brought to the Hospital at half-past 11 o'clock P.M. on the 3rd of January, 1859. She was one of the sufferers by the accident at the Polytechnic Institution. It was said that she was insensible when first taken up from beneath the mass of heavy stones which fell upon her; but, before her arrival at the Hospital, she had recovered consciousness.

On admission, she was found to have sustained general concussion, with some degree of shock to the system. The general surface was cold and pale; the pulse slow and feeble. She replied to questions promptly and naturally. The pupils were equal, moderately dilated, and answered to light. She had pain at the nape of the neck and at the occiput, but no swelling could be detected there. The left temple and upper part of the corresponding cheek were swollen; and the skin was grazed from a blow inflicted principally over the left jugum, but no fracture there or elsewhere in the skull could be detected. From the left ear there flowed a stream of blood of a watery appearance, as if diluted. The quantity which flowed was so great, that the patient's linen and the sheet of the bed below were extensively stained. It was estimated that about a drachm of this sero-sanguinolent fluid escaped in less than a minute. Her countenance was natural. The head was ordered to be shaved, and a spirit lotion to be constantly applied; and half a drachm of powder of jalap with calomel to be given immediately.

Jan. 4th, 9 A.M. She vomited slightly twice last night: at the first time, the vomited matters contained a small quantity of blood. On the whole, she has passed a quiet night. The discharge from the ear continued to flow at the rate mentioned for about an hour and a half last night; it then lost its florid colour and diminished in quantity, but did not cease. It is now nearly clear, like serum slightly stained with blood; and the amount discharged was observed to be increased when she strained in the act of vomiting, or even coughing. This effect was not produced by movement of the jaws, as in mastication. To-day the discharge consists of a perfectly clear serous looking fluid, oozing constantly from the external meatus, and increased by every act requiring a forcible expiratory effort, as coughing or sneezing. The countenance is calm and natural; the pupils are equal, and moderately dilated. There is some slight aching of the forehead, and occasional shooting pains behind each ear, which (as she expresses it) "seems to shoot across from one ear to the other." The pulse is 80, soft and compressible. The general surface is warm and soft. She has passed healthy looking urine this morning. The powder has acted well once. She was ordered to have one-sixth of a grain of tartar emetic, and two grains of calomel, every four hours; and to have gruel only for diet.

10 P.M. There have been no unfavourable symptoms. The discharge from the ear has continued more or less throughout the day. There is no increase of pain in the head; no undue heat of the scalp; the skin is generally warm and soft. Pulse 88, free from hardness. The tongue is moist; she has no particular thirst. The bowels have acted twice since the morning; the motions are free from blood.

January 5th, 9 A.M. She has passed a favourable night, having had some hours good sleep. She looks cool and comfortable to-day. The oozing of a clear fluid from the ear has continued up to the present time, and is increased by any straining effort, as in sneezing or coughing. The bowels are easy. The urine is of proper quantity, and not high coloured. The tongue is moist, slightly coated. She has no thirst. Pulse 86, soft. The gums are a little reddened. The calomel and antimony powders and the lotion were continued.

10 P.M. There are no indications of inflammatory action. She has only slight aching of the forehead when she lies still in bed; but on turning round she feels pain, "which seems to shoot across behind each ear", and the "whole head *feels heavy*". There is little or no discharge from the ear, except during the act of coughing; and then it issues with a slight gush. The discharge is of the same watery character.

Jan. 6th, 1 P.M. She passed a comfortable night. There has been no discharge from the ear during the night or this morning. Mr. Shaw fancies there is slight strabismus. There is no inequality of the pupils; no double vision. She has the same "peculiar sensation" in the head as yesterday, but only on turning in bed. Pulse 85, soft, and of good strength. The gums are a little tender. The tongue is rather more coated, but moist. The powders were ordered to be taken every eight hours only.

Jan. 7th. She is doing well. There has been a slight discharge from the ear again this morning; but the matter discharged is now rather fœtid, and stains the lint which she keeps in the ear. She has no particular pain in the head. Pulse as yesterday; she has no thirst; the bowels are easy. The powders were ordered to be taken night and morning. She was allowed broth.

Jan. 8th. She was rather restless during the early part of the night, but slept comfortably towards the morning. She says she felt an unusual sensation in her head before she got to sleep last night. She describes it as a "sort of giddiness, with a feeling of weight of the whole head". The discharge from the ear has been more free during the night, and contines this morning. It is still fœtid, and stains the lint of a yellowish colour, like pus. She cannot hear the ticking of a watch at the distance of half an inch from the affected ear, the finger being placed in the opposite ear; but when the watch is brought near enough just to touch the ear gently, she can hear the ticking, but still very faintly. She has a slight "rumbling noise" in the ear from which the discharge proceeds. The pulse has increased to 90, without hardness. The bowels act twice in the twenty-four hours. The tongue is moist, and cleaning; she has no thirst. The medicine was omitted; the lotion was continued. She has taken the broth with good appetite.

Jan. 9th. She is doing well. There is still a little purulent

discharge from the left ear, with occasional shooting pain behind each, more especially on sitting up in bed, when she has also some "giddiness". Her appetite is improving; but she is allowed only beef-tea. The pulse is as yesterday. The tongue clean and moist.

Jan. 11th. The discharge from the ear continues. The pulse has got up to 96, but is soft and readily compressed. The "pain and feeling of heaviness" on lifting the head from the pillow are not so great. The tongue is clean and moist; the gums are less tender. She was allowed pudding extra daily.

Jan. 12th. She is still doing well. The pulse has gone down to 88. The skin is cool and moist. The discharge from the ear continues, but in diminished amount. She takes her pudding and beef-tea with a good appetite.

Jan. 14th. There is still slight purulent discharge from the ear. The "giddiness and sense of weight in the head", though much diminished, are still felt on sitting up in bed. Still she sits up in bed and talks cheerfully to her friends.

Jan. 16th. She has gone on well since the 14th. There is still a slight purulent discharge from the left ear, and some giddiness on rising in bed. The strabismus is scarcely perceptible.

Jan. 18th. She is doing well in every respect; there has been no discharge from the ear during last night or this morning. She was allowed to have broth, pudding, and an egg daily.

Jan. 22nd. She is out of bed. There is no pain in the head, but still slight giddiness, and occasional sense of weight, which she attributes to weakness.

Jan. 24th. She has got up each day without any unfavourable symptoms, and with gradual improvement in strength. Mr. Shaw has given permission for her to leave the Hospital to-morrow.

Jan. 25th. She walked out of the Hospital to-day, merely supported by the arm of a friend, and complaining only of "feeling rather weak." She had taken no medicine since the 8th.

Jan. 26th. Mr. Brend visited her, by Mr. Shaw's request, at her own house. She had slept well the previous night. She was then cheerful, and free from pain, except slight aching of the forehead, and occasional slight giddiness on sitting up. On applying a watch to the left ear (that from which the discharge had proceeded), the right ear being at the same time stopped with the finger, she declared that she could not hear the watch tick; and she further stated that she had convinced herself from experiments that she had entirely lost the sense of hearing in the left ear.

Jan. 28th. Mr. Brend visited her again to-day. She expresses herself as "quite well, except for the loss of hearing on the left side." When asked, she says she has no pain in the head, but still occasional giddiness.

Since January 28th, she has called at the Hospital twice to inquire for a young woman, one of the sufferers by the accident, and still in the Hospital from fracture of the lower jaw. When last there, the sister stated that she was cheerful, and complained of nothing but the loss of hearing in the left ear. She had much improved in strength, and had taken some pretty long walks.

Remarks. Our report of these interesting cases has already reached such a length that we must confine our commentary upon them to a very small space, merely indicating the leading points of interest in each of them. In the first, there could be no doubt of the existence of fracture of the vault of the skull, with slight depression at the seat of (but not exposed by) the scalp-wound. This fracture, however, not being compound, and being unaccompanied with depression, was left alone; and with the happiest results, no symptom of irritation of the brain having supervened. Nor is the old rule of surgery—always to elevate a compound fracture with depression—by any means absolute in our modern hospital practice. We observed, a short time ago, a notable example of the success of the expectant plan, which we shall be able, perhaps, to lay before our readers. It is possible that the fracture in Mr. Shaw's first case might also have extended into the base of the skull; and in fact, in the great majority of the cases of fractured vertex which occur in civil life—*i. e.*, those which are occasioned by falls and heavy blows—the fracture will be found to extend into the base. But there was no absolute proof of this in the case before us, as the amount of hæmorrhage was not greater than occurs sometimes without fracture, and there was no loss of hearing. It is interesting to note the threatening symptoms of inflammation of the brain, and the way in which they yielded to the antiphlogistic action of calomel and tartar emetic.

The second case is a more unusual one. Here the existence of fracture of the petrous portion of the temporal bone was indubitable, being proved by the escape of a serous fluid from the ear *immediately after the accident*, and by the persistent lesion of the auditory apparatus, occasioning deafness on the affected side. It is well known that the symptom which used to be relied on as pathognomonic of fracture of the petrous bone—the escape of a serous fluid—has been observed where no fracture existed. Such a case is reported by Mr. H. Gray in the 6th volume of the *Pathological Transactions*, p. 22; but if that case is read attentively, it will be seen that, although it presents a considerable analogy to the present one, the evidence of the escape of the serous fluid *directly* after the accident, which is the vital point in this inquiry, is not at all distinct, and if our memory of the case (which we watched at the time) does not deceive us, there was always considerable doubt upon that point. Now there is no difficulty in understanding that when the membrana tympani has been ruptured, as it was in that case, and therefore the mucous lining of the tympanum and mastoid cells exposed, a large quantity of fluid may be secreted in a short space of time by the latter membrane, which, if mixed with blood, would be indistinguishable from the subarachnoidean fluid which escapes in cases where the petrous bone has been fractured and the tube of arachnoid laid open which coats the seventh pair of nerves. But when the discharge occurs immediately, it is difficult to see from what source other than the subarachnoid space such a quantity of clear fluid can run. That this was the source of the discharge here is further proved by the fact of its flow being increased by strong respiratory efforts. Such efforts would have had no effect upon the contents of the tympanum until a communication had been opened with those of the skull, which receive a distinct impulse from every respiration.

The case was a most fortunate one in its event; and it is not improbable, as was conjectured by the reporter, in some ingenious observations with which his notes were accompanied (but which we were obliged to omit for want of space), that the very profusion of the discharge, by unloading the vessels of the brain, might have acted to diminish the chance of inflammation.

Original Communications.

AN ACCOUNT OF A CASE OF MOLLITIES OSSIUM.

By Edward Latham Ormerod, M.D., F.R.C.P., Physician to the Sussex County Hospital.

[*Read before the Brighton and Sussex Medico-Chirurgical Society, June 2nd, 1859.*]

The deformed bones which I have the opportunity of shewing you this evening, are those of a man, formerly of some notoriety in this town. The chief particulars of his history have been kindly collected by Mr. Tuke, to whom I am also very much indebted for his zealous and able assistance in procuring the skeleton.

The father of the subject of these remarks was a shoemaker, about five feet ten inches in height, and stout in proportion; he was a man of dissolute habits, and died of diabetes at the age of fifty-five years. His mother was a Spitalfields weaver, a hard-working industrious woman, who died at the age of ninety-three.

They had six children. One daughter died young, and the other from flooding in childbed. One son died young; another of hæmoptysis, when about thirty-six years old; another was drowned; and the sixth lived to the age of sixty-eight, to be the subject of the very singular pathological changes to which I propose to call your attention. After his birth, his mother had some miscarriages, and bore some children, which died within a few days of their birth: he was the youngest surviving child.

There were no traces of a similar affection in any of his brothers or sisters; and when he came into the world, with both his arms broken, a reason was found for this anomaly, in the fact of his father having kicked his mother in the stomach during her pregnancy. The statement of the fact was probably more correct than the inference. However, he was a

fine child in other respects; and, though rickety, he improved as time wore on, till he was thirty years old, when, in spite of his deformities, and an accident four years before, by which he seems to have injured his thighs, he was five feet three or four inches in height, and had full use of his arms and legs. He could then walk several miles, and do a good day's work at his trade, of a shoemaker, without any inconvenience. He was then in his prime, and at this age he married.

At the age of forty, he seemed to have lost all his bodily strength; and his bones were so brittle, that they would break with the slightest blow. His marriage, and some pecuniary losses which had reduced him to poverty, may have had something to do with the change which had come over his health during these ten years; but in one of the possible causes, he had found a certain cure of his numerous fractures, for his wife had a specific remedy, compounded of various unsavoury ingredients, which she used to apply freely over the injury. Under her management, she says, in twenty-four hours the swelling and pain subsided, and in a month or less, the bone, large or small, was firm again. He had sore need of such a specific, for at one and the same time he had no fewer than seven fractures of different bones. Without any intention of detracting from the merits of the specific, the observations of his wife may be taken to shew that the fractures in this case followed the ordinary rule of such fractures; being attended by little pain or swelling or constitutional suffering, and uniting even more readily than in healthy bones. It does not appear that he suffered any pain in the bones preceding the occurrence of the fractures, as has been often noticed in these cases.

It was subsequently to the age of thirty, when he married, and poverty overtook him, that the chief changes in his skeleton, both the gradual bending and the sudden fractures, occurred. But I cannot obtain any exact history of these changes, so as to assign precise dates to the various fractures which we see now. He was well known, like his son and daughter, as a frequent applicant at our Hospital, on account of fracture of one or other bone, which united badly or not at all. But, as I have said, his wife soon got used to his bones breaking, and such an occurrence might often pass wholly unnoticed in the family circle, especially when he lay in bed, as he did almost entirely for the last few years of his life. He died, worn out by the constant pain caused by his distortions, and by some ulcers on his legs, at the age of sixty-eight; when he measured, as he lay on his back at his full length, no more than thirty-nine and a half inches.

This little deformed body contained a mind of considerable power, to however ill purposes it was applied. I am not idly raking up the records of a life of low blackguardism. We must not think how bad this man would have been had his ready wit been associated with a more able body to carry out its biddings: we may rather charitably believe that it was the disproportion which existed between his intellectual and bodily development which so depraved him. The condition of the brain in rickets is a psychological study of much interest; and I think the subjects of angular curvature of the spine have much to complain of, in the mental and moral faults properly belonging to rickets having been hastily and groundlessly ascribed to them.

This poor cripple was a shoemaker, and kept a low lodging house. While his money lasted he lived a very profligate life; and, so long as cockfighting was in fashion, he kept an establishment for that purpose. He was hasty and violent in his temper. Among his neighbours he always passed as a clever and ready man, and his intellect remained clear to the end of his life. He lived well, and chiefly on animal food; for the last seven or eight years of his life he took about three grains of opium daily, and was rarely without his tobacco-pipe in his mouth. I have no information as to the state of his urinary secretion, nor, indeed, as to any of the bodily functions, beyond mere general statements.

He had four children, all healthy-looking at their birth, two of whom, however, survived for a few hours only. These were both boys. The third boy lived to the age of sixteen years, when he died of small-pox. He was a frequent applicant at our Hospital, on account of broken bones, where he is still remembered as a most thorough-paced precocious little blackguard; or, as his mother has it, a singularly lively and sharp-witted child.

The poor daughter's history is a very sad one. She too, like her father and brother, was always breaking her bones, and was a frequent applicant at our Hospital. And, under the same domestic moral training as her brother, her precocious mind was similarly developed. The two children used to attend public houses to enliven the company as singers and jesters; and, when she could not walk, she used to be carried from one low pothouse to another, in her degrading vocation. She grew up as deformed as her father, and, in an evil hour, some one was tempted by her portion of twenty pounds to marry her. She became pregnant several times, but aborted at a very early period. One pregnancy, however, was unfortunately protracted to the eighth month, and it became necessary to perform the Cæsarean operation, from the effects of which she sank after three days, at the age of twenty-three.

The late Mr. Stafford extracted, by this operation, twin children, one already dead, and one which survived its birth only a few hours. The children were, to all appearance, well-formed for their age; but so had their unfortunate mother and her brothers been at their birth, and it is scarcely a matter of regret that by their early death this decrepitude was prevented from propagating itself to the third generation.

When I point to this almost perfect skeleton, as you see it now, which we owe to the careful manipulation of Mr. Charles Humphry, you will hardly sympathise with my regret that the examination of the body was so superficial. But, although it would have been of the greatest interest to have studied the morbid changes throughout, we were compelled, under the circumstances, to limit ourselves to the abstraction of the bones. And I take this opportunity of sincerely thanking the gentlemen who so very kindly gave me their assistance in a work of great fatigue and discomfort, and some little danger.

I may mention that the preparation of these bones has been attended with unusual difficulties: for the cold weather interfered very much with the putrefactive process during the first few days of the maceration, on which so much depends; and the bones are so soft and brittle that it was unsafe to submit them to any of the processes by which we complete the cleaning of healthy bones. I offer this apology for the stains which you may see here and there, disfiguring the skeleton to the eye of an anatomist. I have also to regret the loss of several bones, namely, the coccyx, and several of the bones of the toes, which have fairly melted away during the process of maceration; a circumstance not to be wondered at when we observe that all the bones of the feet which have been preserved consist merely of a mass of greasy adipocere, enclosed in a shell of periosteum.

At the suggestion, and with the assistance of Mr. F. Humphry, I have laid the skeleton in the recumbent position, very nearly that which the man occupied during the last bed-ridden months of his life. By this means the bones are exposed to the least possible strain; but with all the care that has been spent upon them, I fear that this singular preparation will not be a very permanent addition to our Museum.

There are three forms of disease of bone, all more or less closely allied, if not absolutely identical, which find ample illustration in the specimen before us; namely, mollities and fragilitas ossium, and rickets. On each of these I would make a few general remarks.

The points of difference between mollities and fragilitas ossium are not, for the most part, considerable. In both cases the disease is essentially an atrophy of bone; only in the former the earthy constituents are the first to be removed, and the bone gradually bends; while, in the latter, the softer constituents are chiefly affected, and the limb retains its proper form till the bone is broken by some accident. We might say, perhaps, that in the case of mollities ossium there is a degeneration, the earthy part being replaced by a more flexible, fatty material; while, in the case of fragilitas ossium, there is simple atrophy, the bony structure being weakened or disintegrated, rather than degenerated.

Regarding the most prominent distinctive character of these two forms of disease, namely, the alternative of bending or breaking, as a mere accidental circumstance, there is yet one important differential feature in their pathology.

I believe that mollities ossium is always a primary disease, while fragilitas ossium is sometimes secondary to other diseases, particularly to cancer; always, however, remembering to distinguish the fractures resulting from this general pathological condition from those which are dependent on a cancerous deposit in the bone, a point not always easy of discrimination from the symptoms alone. For, accidental as the fractures in fragilitas ossium may seem, yet, not unfrequently, the patients have been able by local pain to foretell the occurrence of a fracture of any particular bone.

In rickets another element has to be considered. Here is

not only atrophy, but arrest of bony development. The childish characters of the skeleton linger on into advanced years, and are clearly to be traced along with the results of the degeneration of particular bones. The large cranium, the small face, the narrow pelvis, and the stunted, feeble lower limbs, are quite as characteristic of rickets as the distorted extremities are. But these effects of rickets on the skeleton have been so fully elucidated by Mr. Shaw, that I can do no better than refer to his interesting essays for all further information on this subject. (*Medico-Chirurgical Transactions*, vol. xvii, and xxvi).

In rickets, again, there is this very important peculiarity, distinguishing it from mollities ossium, namely, that the disease is remediable. The bent bones, indeed, do not become straight, but they are made as strong as they would have been under any other circumstances. The undeveloped bones, indeed, never acquire the normal proportions; but they grow, and the limbs may have their natural bulk, though they want perfect physiological symmetry. But the disease ceases at last, and a period in the child's pathological history passes away, for the most part never to return.

The recorded histories of cases of mollities ossium do not lead us to believe in the power of any remedial agency to check the disease, nor justify any expectation that the disease will stop of itself. A fractured bone will sometimes repair itself under these circumstances, even more rapidly than in a healthy subject; perhaps from the limited affinity displayed by the rest of the body for the accessible phosphate of lime with which the bone is to be repaired. But some such unnatural stimulus seems to be required to induce ossific action, for elsewhere the disease steadily goes on to disorganise the bones.

The opinion thus far implied of the close analogy, if not the essential identity, which subsists between these forms of disease of bone, though very generally received, is objected to by no less an authority than Rokitansky (*Pathological Anatomy*, Sydenham Society's Translation, vol. iii, p. 177); and Mr. Solly has also been led, by observation of two cases of mollities ossium (*Medico-Chirurgical Transactions*, vol. xxvii, p. 459), to doubt its identity with rickets.

Still, the general opinion is that the results are the same, and referable to a similar process of atrophy, or fatty degeneration. And, just as fatty degeneration of different organs may own many different causes, all imprinting their own characters on the results, so may it be with fatty degeneration of the bones. No one would hesitate to name inflammation as one of the most frequent exciting causes of fatty degeneration; but pathological evidence, on the strength of which we refer some cases of mollities ossium to this cause, must be allowed equal weight on the other side, when it leads us to infer that there has been no inflammation at all, whether of the heart, or the liver, or, what concerns us at present, of the bones. Not doubting that some of these cases are of an inflammatory origin, still, we are not in a position to maintain that they are all such. And, excepting only this change in the lower end of the right femur, I do not believe that such is the pathological nature of any of the morbid appearances in the preparation before you.

With these few general remarks, I will proceed to the particular examination of the skeleton.*

The skull displays the ordinary character of rickets in the disproportionately large size of the cranium as contrasted with the face; not so much from a general excessive development of the cranium, as from an arrest of the development of the face. Individually, the cranial bones are imperfectly developed, the sutures are not closed, and Wormian bones are present in unusual places, as on the anterior edge of the left parietal bone, and the upper edge of both squamous bones. In their usual situations, along the mastoid and lambdoidal sutures, they are so numerous and so loosely compacted, that the skull might readily be broken by slight pressure. The outer surface is smooth and healthy looking; but the bones are so thin that in many places a pin may be pushed through them, and the left frontal sinus is only imperfectly closed in. But, in contrast to the want of development of the several bones, the great width of the forehead and the length of the cranial cavity from before backwards, are particularly remarkable. Equally remarkable is the depression at the upper angle of the occipital bone.

This arrest of development and atrophy appear in a more marked degree in the facial bones, which, notwithstanding all the care that has been taken in their preparation, look rough and papery. The alveolar processes of the upper jaw are hardly represented at all, and the lower jaw displays all the characters of edentulous old age. From behind the symphysis springs a strong forked bony process, calculated to give increased attachment and leverage to the muscles which have their origin here. I think that this is almost the only instance of such a provision to be noticed in this skeleton.

The vertebral column is contorted in the strangest way. There is very little bending in the antero-posterior direction; the distortion is lateral. One large curve, with the convexity to the right, begins at the third cervical vertebra, the chord of the arc touching the twelfth dorsal. While the chord of the other curve, which has its convexity to the left, reaches from the upper edge of the sacrum to the fifth dorsal. The length along the curves is seventeen inches; from the atlas to the sacrum, in a straight line, only fourteen; being half an inch less in the bones as they are mounted, than in the recent specimen.

There is not much to notice in the vertebræ themselves, they are small, and of a light porous texture. Their shape has been accommodated to the gradual distortion, the bodies being thinned on one or other side, and the spinous processes twisted according to the direction of the curve of the column in that part.

Their bodies, as is usual, are turned slightly round to face in the direction of the convexity of the curve. The ribs, here and there, have contracted slight bony adhesions to the vertebræ, but these are not, in any instance, anchylosed to each other. How, under these circumstances, any form of a thorax could be preserved, and the functions of the thoracic organs maintained, was a problem on whose correct solution hung this man's life. Let us try to trace this solution in detail.

The sternum and clavicles, almost alone among all these diseased and distorted bones, retain their shape and structure; the sternum being only turned a little towards the left. The first rib is in its natural position, or nearly so, on both sides; but below this the ribs on each side require a separate description. On the left, generally, down to the eighth rib, these bones are thin and slight, placed horizontally, rounded on their outer face, with a well marked ridge along their convexity, and marks along their upper and lower edges as if of articulating surfaces. They lie close along the transverse processes to their ends, over which they are stepped as it were, and thus sweep backwards in a bold curve, to give as much room as possible to the thoracic viscera. Below this the ribs have more of their natural form, though their direction is very irregular, and the want of space at the vertebral end has necessitated their overlapping one another. The seventh and eighth ribs are thus overlapped by the sixth, and the ninth overrides the tenth and eleventh ribs near their vertebral extremity, though they all lie pretty evenly at their sternal ends.

I know of nothing which explains the incongruous positions in which the right ribs, stripped of their integuments and the connecting pleura, seem to lie, so well as a sheet of wet pasteboard, folded in the same way as the pleura must have been folded here. On careful observation, it will be seen that the walls of the chest on this side have been creased, as it were, though the regularity of the folds has been disturbed by the unequal yielding of the several bones.

The cavity of the thorax on this side is much narrowed. The ribs are broad and strong, but they are bent like fishhooks at their angles, and, as they lie overlapping one another, some of their angles come almost into contact with the bodies of the vertebræ. The five upper ribs lie regularly one below the other; the sixth turns upwards, overlapping the three immediately above it, and being itself crossed twice by the seventh rib. The eighth rib is in the return of the fold, but is a little overlapped by the lower ribs, which extend outwards and downwards to cover the right ilium, which seems thus drawn within the thorax.

Such is the position which the right ribs occupy now that they are mounted; and such was very nearly the position which they occupied in the recent specimen. But, with all my care to restore them to the positions which they formerly held, I am

* More complete information on the subject of rickets and mollities ossium may be found in—

Cumin. On Rickets. Cyclopædia of Practical Medicine.
Stanley. On Diseases of the Bones, p. 217.
Shaw. On the Conformation of the Skeleton in Rickets. Med. Chir. Trans., vol. xvii, p. 434.
Shaw. On the Effects of Rickets upon the Growth of the Skull. Med. Chir. Trans., vol. xxvi, p. 336.
Curling. On Atrophy of Bone. Med. Chir. Trans., vol. xx, p. 336.
Solly. On the Pathology of Mollities Ossium. Med. Chir. Trans., vol. xxvii, p. 435.
Paget. Lectures on Surgical Pathology, vol. i, p. 131.
Catalogue of the Hunterian Museum, vol. ii.
Rokitansky. Pathological Anatomy. Syd. Soc., vol. iii.

These works leave little to be desired, but that we might find some means of preventing or removing the effects which they so accurately describe.

conscious that the deformity of the right ribs has been exaggerated. I think that the bones are made to overlap unduly, and I am sure that, instead of diverging as they now are placed, they ought to lie closer to each other. Some of this error may be due to the half-inch which has been lost in putting the vertebræ together; some, I think, to warping of the ribs themselves. But I am afraid that there is no remedy; for the bones are so delicate that they could not safely be drawn into closer proximity; and, singularly enough, the bones whose sternal ends diverge the most widely are just those about the correct position of whose vertebral ends there is the least doubt. I am inclined to think that the error is rather in the overlaid than in the overlying ribs. At least, the measure of the lower circumference of the chest now is just what it was in the recent specimen.

There is scarcely a rib on this side but gives evidence of the strains to which it has been exposed, by more or less unequivocal traces of old fractures. The tenth left rib has a fracture still ununited, though the thickened ends of the bones shew the fracture not to be very recent.

Among all this disease, the healthy condition of the clavicles is very remarkable; only they are small, and have had to accommodate themselves a little to the altered form of the other bones. The scapulæ are reduced to thin shells of bone, altered both in their outlines and in the direction of their surfaces by the general conformation of the side of the chest on which they have lain. The general convexity of the outer surface, the thin paper-like structure of the body, and the seeming lengthening of the coracoid process, due to the entire removal of the articular prominence, are very remarkable. But the bony structure, as much of it as is left, appears sound, like that of the skull; only the acromial and coracoid processes are soft and powdery. Both the coracoid processes have been fractured, and the point has taken a new direction downwards. The fracture of the left still remains ununited.

It would be difficult to assign any precise anatomical reasons for having placed the upper portions of the humeri on the sides of the body to which they seem respectively to belong; their natural characters have been so altered by long estrangement from their natural uses and positions. At the lower fractured end there are still prominent ridges for the attachment of muscles; but the articulating surfaces and the tuberosities are altered almost beyond recognition in the shrunk and withered head of each humerus.

The dry powdery condition of the upper fragments, constituting two-thirds or a little less of the whole length of these bones, contrasts strongly, as we shall see again in the lower extremities, with the solid waxy condition of their distal portion. This is a little triangular bit of bone, which has evidently been disconnected from the upper end for a very long time; the stump of the shaft and the articular surfaces having been all moulded to adapt themselves to their new uses and relations.

The position which the hands take is nearly the same on both sides, the bones of the forearm crossing each other; but, on the left side, both the longitudinal bend and the lateral twist occur near the middle of their length; while, on the right, this same position of the hand is produced by the radius being twisted half round the ulna at its upper end. The right bones are stronger, and have bent less; so that this forearm is full three-quarters of an inch longer than the left. Both hands are light, and free from distortion; but the bones are all soft and greasy. Some of the right carpal bones have a porcellanous articular surface, as if from rheumatic gout.

The diminutive size of the pelvis as a whole is a pathological feature eminently characteristic of rickets, which not only, as has been said, induces disease or degeneration of the particular bones, but arrests their due development. The sacrum comes forward to an unusual extent, the ossa ilii overlapping it behind, and being within an inch and a quarter of meeting. This also is a change usually referred to rickets; but, instead of descending straight, so as to enlarge the lower aperture of the pelvis, the sacrum is bent forward on itself, as if by disease supervening at a later period. The coccyx has been destroyed by maceration, so that we have no accurate knowledge of the extent to which the lower aperture of the pelvis was actually narrowed. The anterior superior spines of the ilium represent the points of the extreme divergence of the cristæ ilii, and are only nine inches apart. Measures, however, can convey a very inadequate idea of the distortion at the upper outlet. Besides the general constriction from the arrest of development and the advance of the sacrum, the right pubic bone has been pushed back, so as to lie within a quarter of an inch of the front of the sacrum. The acetabulum, with the sutures of the bones which usually meet to constitute it gaping widely, is occupied by the great trochanter; the head of the femur rests in front and to the outer side of the tuberosity of the ischium; while the joint, such as it is, is constituted by the upper surface of the neck of the femur rubbing on the thickened ramus of the ischium and os pubis. The shaft of the femur is bent very strongly, to accommodate the limb to this extraordinary position of its articular extremity. On the left side, the changes are much less marked; the acetabulum preserves its form, and discharges some of the functions of a socket for the atrophied head of the femur. The appearance of the articular surfaces, however, does not convey the impression that there has been any great amount of movement of this fragment of the thigh-bone.

In the absence of any reliable sources of information, we are left to conjecture as to the cause of these singular distortions; but I think that they may all be referred to the spinal curvature as the starting-point. First, the spine yielded, and the weight of the body was thrown on the right side of the pelvis and the great trochanter of this side. Under this pressure, the acetabulum gave way, and the distorted femur was drawn into its present position. A similar collapse on the left side would have probably quite interrupted the passage through the pelvis, and superinduced fatal obstruction of the bowels. But, besides being relieved of the weight of the body, the muscular pressure has been materially lightened on the left side of the pelvis by the fracture of that femur, and so its form has been preserved. I think that this is the correct mechanical interpretation of these singular distortions; and as mechanical we must regard them in the first instance, however largely disease may have contributed to the results, both in facilitating the distortion and the displacement, and subsequently in adapting the parts to their altered positions. But this disease was atrophy and fatty degeneration: there is not a single instance of caries or scrofulous disease of bone in all this skeleton.

The lower end of the right femur displays another very singular change. The shaft is bent and twisted on itself; but, instead of swelling into the condyles, it is abruptly broken off, and the end of the shaft is forced into a thin shell, which preserves the outer form of the condyles, and articulates as usual with the tibia. The rounded edges at the end of the shaft, and the spongy or woolly deposit of bone in its neighbourhood, show that this separation of the epiphysis has been of long standing, and accompanied by some irritation. On the left side, the femur has been freed, as already noticed, from such a strain, by a fracture near the upper third; and the two portions of the bones preserve their normal shape. There does not seem to have been any attempt at union; on the contrary, absorption appears to have been very active here; and the two long oblique worm-eaten surfaces, which are visible on the outer side of the upper and the lower fragments alike, seem to need the presence of a third fragment, which has been entirely removed, to make up the substance of the bone here.

The lower end of the left femur, and the bones of both the legs and feet, are not of the light, spongy texture which the bones of the trunk display; but are heavy and greasy, like the distal fragments of the fractured humeri. This greasy condition does not prevail to an equal degree through all these bones, and in their entire length. It is most marked at the extremities, but the shafts are soft, and the boring tools came out greasy instead of being followed by a light, powdery adipocere, as in other parts of the skeleton. The bones of the leg are soft, not brittle, and, under the weight of the body and the traction of the muscles, they have bent till the fibula forms a curve of which the radius is no more than three inches and a half.

In both limbs the fibula is on the inside of the curve; in the right, it is received into a groove of the tibia; in the left, it is fixed in its position by anchylosis. But no more bone has been deposited than is actually necessary, and even the sites of chronic ulcers over the shins are marked by no deposit of bone on the rounded edges of the tibia.

It has been objected to a purely mechanical explanation of the bending of ricketty bones, that they do not always, indeed, very rarely, bend in the direction of least mechanical resistance. And these two legs might be taken as instances where the bending has taken place precisely in one of the two directions in which, in consequence of their relative position, the two bones would offer most resistance. The disease has been, therefore, supposed to exert a modelling influence on the distorted growth of the bone, independent of mechanical considerations. I would not hazard a general opinion from the exami-

nation of these bones. I would only observe, that before rejecting the mechanical explanation, we must thoroughly investigate the particular case: for the direction of the greatest muscular strain is as effectual a cause of bending, as the direction of the least bony resistance; and I can easily conceive the muscles of the calf to have determined the direction of the curve here.

The feet need not occupy us long. All the bones have been preserved except a few phalanges which have melted away under the protracted maceration. The tarsal bones are many of them distorted, though not to such an extent as to throw any real difficulties in the way of their proper arrangement. And they are all small and ill-developed, contrasting strongly with the bones of the hands. But it is not surprising that they have yielded to the constrained posture in which they were placed, considering that what we call bones by courtesy, are really nothing more than fatty matter, contained within a thick case of periosteum.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. MARKHAM, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

III.—CAUSES OF PERICARDITIS.

INFLAMMATION of the pericardium is in no case to be regarded as an idiopathic inflammation. It may in almost every instance be traced either to local injury, or to some morbid condition of the system generally. Pericarditis, as the result of direct local irritation, has many different exciting causes. It may be produced by traumatic injuries, by blows and wounds. Tubercle or cancer deposited upon the serous surface of the membrane, or spreading into the sac from the parts around, will occasion it; so also may abscess of the liver, of the mediastina, and of the neighbouring parts, hydatids of the liver, ulceration of the œsophagus and of the stomach, etc., by opening into the sac, and there discharging their contents. Pleurisy, pneumonia, and peritonitis—all these, and similar local sources of irritation, may likewise excite inflammation in the membrane.*

Tubercle and cancer very rarely, if ever, arise primitively in the pericardium. These diseases almost invariably preexist in some other parts or organs of the body, before they appear here. Cancer generally spreads into the sac from the mediastinum, or some neighbouring organ affected with the morbid growth.

Pericarditis is more especially known to us as it appears in association with general disorders—with rheumatic fever, kidney diseases, tuberculosis, pyæmia, and the acute exanthemata. In such case, it is manifestly the local manifestation of a general affection of the body—the product, perhaps, of some morbid condition of the blood. But, though we have in these diseases evidences enough to satisfy us of the existence of some deleterious agent in the system, we are still quite in the dark as to the causes which determine the disease to fix itself especially in the pericardium.

If we reflect upon the catalogue of diseases which authors record as causes of pericarditis, we shall perceive that what are frequently written down as causes are, in reality, merely coexisting manifestations of the self-same disorder as that which provoked the pericarditis. In this sense, acute rheumatism cannot properly be called the cause of pericarditis. Both the affections are the resultants of a morbid state of the blood, and, as it would seem, of the same morbid state. What may be truly said of their association and relationship is this—that the morbid element of rheumatism more frequently displays its presence in the joints than it does in the pericardium; and more frequently at an early than at a late period of life. This becomes still more clear, if we call to mind the fact, that the pericardial inflammation does occasionally precede the arthritic affection in rheumatic pericarditis.*

Dr. T. K. Chambers, in his *Decennium Pathologicum*, gives us a list of one hundred and thirty-five cases of diseases in which recent signs of pericardial inflammation were found after death. These diseases are, as I have observed, ordinarily termed *causes* of pericarditis, but must be rather designated as coexisting disorders.

	Cases.
Rheumatic fever	18
Ditto, with diseased heart and kidneys	1
Uræmia from diseased kidneys, either alone, or with diseased heart	36
Diseased heart and dropsy	18
Pyæmia	18
Pneumonia	10
Pleurisy	5
Vomicæ in the lungs	8
Erysipelas	4
Typhus	3
Other causes	13

A glance at this table shows us, as Dr. Chambers remarks, how decidedly the constitutional predominate over the (so-called) local causes of pericarditis. Dr. Ormerod, for the better comprehension of these so-called causes of pericarditis, has reduced them all under two heads, viz.: 1. Rheumatic pericarditis; 2. Non-rheumatic pericarditis. This division of the inflammation will be found of practical utility. A study of the clinical history of pericarditis shows us that there are marked points of distinction to be observed in its nature, which enable us readily to class the disease under one or other of the above heads. These distinctive signs give us a clue to the nature of the disease, showing how its characters vary in different cases, and consequently how varied, and even opposite, its proper treatment must be under such circumstances. I shall, therefore, point out the distinctive characters which appertain to the rheumatic and to the non-rheumatic kinds of pericarditis.

Rheumatic pericarditis occurs at a comparatively early period of life. The average age of sixty-one of Dr. Ormerod's patients was twenty-one. The subjects of the disease are, for the most part, of (apparently) healthy constitution. As regards sex, women appear as often as—perhaps somewhat more often than—men, to be affected by it. The symptoms of the rheumatic pericarditis are prominent and well marked. The disease, except in rare instances, is associated with, and, in fact, preceded by rheumatic affections of the joints, which are of so striking a character that they cannot fail to excite the attention of the physician. The local pericardial inflammation, moreover, frequently reacts with violence on the system; and in such case, when death ensues, it is to the immediate consequences of the pericarditis—to the action of the inflammation on the heart itself—not to the *ordinary* effects of rheumatism, that the fatal result is ascribable.

The heart is overwhelmed and paralysed by the local action of the inflammation upon it. But though the symptoms of rheumatic pericarditis are usually severe, the disease, when uncomplicated with other cardiac diseases and pulmonary affections, rarely destroys life by its direct and immediate effects. A first attack of rheumatic pericarditis is, indeed, very rarely fatal.

Many observations lead me to suspect that there is an hereditary tendency, or family predisposition, to rheumatic pericarditis in the young; though, for obvious reasons, it is very difficult to arrive at any positive conclusions on this point. I have, for instance, remarked the existence of cardiac disease in the children of parents who have themselves suffered from rheumatism and heart disease. The following are examples of the fact which have fallen under my notice:—

In one family, the father and two children had disease of the heart. The father had suffered from several severe rheumatic attacks before the birth of these children, and there is now a constant cardiac bruit audible over his heart. In the children, about 14 and 15 years of age, the heart is so impaired as to produce the severest symptoms of cardiac disease. One seems to have once suffered from pains in the ankles; but, as far as I could learn, the other never had suffered from any external symptom of rheumatism. Her first complaints of illness were short breath and dropsical swellings, the products of the cardiac disease.

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* I once saw a case of pericarditis, which resulted from ulceration of the œsophagus. The ulcer in its progress opened at last into the pericardium, and so permitted the contents of the stomach to pass into the pericardium. This is the only case of pneumo-pericardium which I have ever seen. The air, of course, came from the stomach in this instance. By gently pressing upon the stomach, its contents were readily forced, and seen to pass, up the œsophagus, and so through the ulcerated opening into the pericardium.

* A case of this kind is related by Dr. Graves, vol. ii, p. 159, "Clin. Med."

In another family, the father had for years been a martyr to rheumatism; and his child, about two years and a half old, had organic disease of the heart.

A child, 10 years old, had had rheumatism, and when I saw her had mitral valvular disease. Her mother had been ailing twenty years, and a loud systolic aortic bruit was in her audible over the heart.

Moreover, it is not at all uncommon to see two, and even three, children in one family attacked with rheumatic pericarditis; but then it may be in some instances objected, that the children are all exposed to the same exciting influences of disease, and that, therefore, what has produced the affection in one, may also have excited it in the other.

Non-rheumatic pericarditis, on the other hand, occurs at a later period of life than the rheumatic kind. Forty-two was the average age of persons affected by it in twenty-four cases reported by Dr. Ormerod. The subjects of the disease were, with a single exception, all of the male sex. The inflammation does not so much attack the healthy, as those whose constitutions are originally weak, or have been debilitated and depraved through indulgence in ill-habits of living. It is far more serious than rheumatic pericarditis in its immediate consequences.

Dr. Ormerod informs us, as the results of his experience that 91·6 per cent, of his non-rheumatic cases were fatal; whilst of the rheumatic sort, 18 per cent only were fatal. The local symptoms, again, of non-rheumatic pericarditis are at times very obscure; they are often, indeed, so obscure as not to direct the observer by any local signs to the seat of the disease, and thus it not unfrequently happens that the existence of the pericarditis is first discovered only after death.* In correspondence with this fact, it may be observed that the local inflammation does not appear to exercise, by reaction (as happens in the case of rheumatic pericarditis), any particular influence over the patient's general condition, so as to appear in any direct way a cause of death. Moreover, the pathological changes found after death are not so considerable as those which result from rheumatic pericarditis, a circumstance which may explain, in some degree, the frequent absence of local symptoms during life in non-rheumatic pericarditis.

It is not, therefore, by the violence or the immediate effects of the local inflammation, that life is destroyed in cases of non-rheumatic pericarditis.† Death rather results from the general action of that particular disease which has, in fact, preceded, and has given rise to, the pericarditis. Thus, for example, when pericarditis appears in the course of kidney disease, it usually supervenes at an advanced period of the renal disorder; but kidney disease (of the character here inferred) is, as we well know, for other reasons fatal in its consequence, and quite independently of its action upon the heart. The serous membranes, under the influence of uræmic disease, readily take on inflammatory action; and, of all the membranes, the pleural and the pericardial appear to be most frequently subjected to it.

Thus, then, in *non-rheumatic pericarditis*, the local inflammation plays a subordinate part. Its share, as a disturber of the system, is but small; so that it is, in fact, usually little more than a local sign (unimportant in its immediate effects) of a serious general disorder. In *rheumatic pericarditis*, on the other hand, the local inflammation must be considered, for the moment, as the all important fact; its consequences fall at once, and with violence, upon the heart; the inflammation is sthenic, and its products may be of such a nature as to act directly on the heart, both impeding mechanically, and otherwise seriously deteriorating its powers. The general constitutional disorder with which it is associated is subordinate in importance to the local inflammation, which it has engendered.

The causes of *non-rheumatic* pericarditis, as may be inferred from what has been said at the head of this chapter, are of two kinds. They are local and constitutional. The chief local causes are: cancerous diseases, arising within the sac, or, as much more frequently happens, spreading into it from some of the parts around the pericardium; tuberculosis, pleuritis, and peritonitis, by acting as local sources of irritation; abscesses of neighbouring organs or parts; and hydatid cysts, by opening into and discharging their contents into the sac.

The chief constitutional causes, or, to speak more correctly, the diseases in connection with which the non-rheumatic pericarditis is observed, are diseases of the kidney, pleurisy, pneumonia, pyæmia, scarlatina, peritonitis, variola, etc.

Bright's disease of the kidney has been especially referred to by authors as a very frequent excitor of the inflammation. My own experience does not at all agree with this conclusion. Out of a great number of cases of kidney diseases which have come under my observation in the pathological department of the St. Mary's Hospital, I have met but with very few where there existed any recent signs of pericardial inflammation. The same results have been arrived at in Edinburgh, where kidney disease is very common.

Professor Bennett (*Principles and Practice of Medicine*) tells us, "That in none of his cases of pericarditis has there been a complication with Bright's disease."

Dr. Christison also says that pericarditis is rarely seen among the sequelæ of kidney disease.*

Happily, a knowledge of the actual relative proportion of the frequency of pericarditis, in coincidence with kidney disease, is not of much practical importance to the physician; for the knowledge would in no manner advance his therapeutical powers over it. Pericarditis, when it does thus arise, comes on in the advanced stages of the kidney disease, and would, under such circumstances, claim no special attention as an object of treatment. In all the cases, indeed, of non-rheumatic pericarditis, of *constitutional origin*, the treatment has no direct reference to the pericardial inflammation; it is guided entirely by the nature of the constitutional disease with which it may happen to be associated. Herein it differs essentially from the treatment of rheumatic pericarditis.

Relation of Pericarditis to Rheumatic Fever. Statistics have as yet given us no sure information on this subject. M. Bouillaud and Dr. Hope found pericarditis present in about one half of their cases of acute rheumatism; but their experience does not at all coincide with the conclusions arrived at by later observers.

Dr. Taylor makes the number about one case of pericarditis in nine of rheumatic fever; Dr. Budd, about one in eight; Dr. Latham, about one in eight.

It is well to remark, however, that results on this subject, derived from the observation of cases which have been taken indiscriminately, without regard to age or sex, are of very little value; for it is a fact that at certain periods of life the coincidence of the rheumatism and the pericarditis are much more common than they are at others. Thus, adult persons attacked by acute rheumatism are infinitely less liable to cardiac complications than the young are. After the age of thirty, pericardial and endocardial inflammations are comparatively rarely met with as the associates of rheumatism; whilst, on the other hand, before the age of twenty, and in early life, they are more frequently present than absent in connection with that disease.

Every physician must have frequently had occasion to corroborate the fact stated by Dr. Watson—a law he calls it—namely, that the younger the patient is who suffers acute rheumatism, the more likely will he be to have rheumatic carditis. Climate, also, it is probable, has something to do with the matter.†

[*To be continued.*]

* The extremely large fatality (as would appear from the statistics) of non-rheumatic pericarditis is, no doubt, more apparent than real; and for this reason:—As non-rheumatic pericarditis is occasionally only discovered after death, it is evident that it may have existed in cases where recovery has taken place, having escaped observation during the progress of the particular disease with which it was associated. This fact is corroborated by the circumstance, that we sometimes after death meet with extensive pericardial adhesions, in cases where there is no history of the previous existence of any rheumatic affection.

† In some rare cases, however, the amount of effusion is so great as mechanically to interfere with the heart's action.

* It is most probable that those writers who have made kidney diseases stand so high in the catalogue of causes of pericarditis, have set down as instances of the fact, all those cases in which pathological conditions of the pericardium have been found coexisting with kidney-diseases after death. But such calculations are manifestly incorrect. In many of these cases, it is certain that other diseases of the heart and of different organs of the body were present; and in many of these it would doubtless be equally correct (perhaps more correct) to call the cardiac disease the cause of the kidney-disease, as *vice versâ*. Old pericardial adhesions coexisting with granular kidney, can in no way be called the consequences of the kidney-disease; they may have very possibly existed before the kidney-disease began. Of the cases of heart-disease recorded by Dr. Barclay (*Med. Chir. Trans.*, vol. xxxv), I cannot find above two or three in which there is any apparently close relation between the kidney-disease and the pericardial affection. But, on the other hand, I find that in thirty-four of the ninety-two cases there was marked kidney-disease present without any pericardial affection; and that there were found twenty-six cases of lesions of the pericardium without any kidney-disease. Frerichs also (*Die Brightí'sche Nierenkrankheit*, p. 120) found inflammatory exudations in the pericardium in only thirteen out of two hundred and ninety-two cases of Bright's disease.

† Dr. Chevers states, that although articular (acute) rheumatism is very prevalent in India, the association of pericarditis and endocarditis with this affection is very rare. (*Dublin Journal Med.*, 172, 1842.)

CASE OF MALFORMATION.

By J. H. Spencer, Esq., Hallaton.

I was called to Mary Lee, after a midwife, and found what I considered placenta prævia, but which turned out to be what I may call *liver* presentation; the liver with the stomach and part of the intestines being external. There was also singular malformation of the chest, with spina bifida. There was not a trace of organs of generation, nor of anus; and not a vestige of funis could be found. No doubt, from the ragged state of the liver and placenta, they were in close contact, and thus had the child been even well nourished, being quite of the average weight.

The mother had suffered a good deal the fortnight preceding her accouchement; no doubt from the dragging at the placenta, which was firmly adherent. The child was dead, but had not long been so.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, SEPTEMBER 10th, 1859.

THE REPRIEVE OF SMETHURST.

The reprieve of Smethurst, so confidently anticipated by the whole country, has taken place as a matter of course. If he had been hanged, there would no longer have been safety for any medical man who waited upon the death-bed of his own wife, and was more than ordinarily attentive to her.

For Smethurst individually we care little; but it is of the utmost importance that human life should not henceforth be at the mercy of bungling experimenters, imperfect medical observers, and ignorant and under-educated jurymen.

It must have struck our readers that, in the present instance, the real trial of the prisoner took place after the verdict of death had been pronounced, and the judge had, with all due solemnity, put on the black cap. Immediately the evidence had been disseminated throughout the length and breadth of the country, then the real trial of Smethurst commenced. The letters which appeared in the public papers, from a hundred different quarters, formed the true appeal of the prisoner against the decision of the jury; and the result was its reversal. Henceforth the public will not rest satisfied, in trials of life and death, where nice points of scientific evidence are discussed, with the verdict of an ill-informed jury, led by a too-partial judge. If we must not lay hands on the venerable "twelve good men and true", it is clear we cannot go on without the institution of some court of appeal; unless we choose to rest satisfied with that irregular court of appeal, the public press, which in this instance has so unceremoniously put aside judge and jury, and brought its powerful force to bear upon the judge at Downing Street.

If medicine has had the misfortune of leading human life to the verge of the gallows, it is at least satisfactory to know that to medicine we owe our escape from such a public disaster. We think there can be little doubt on the professional mind, that Smethurst owes his life to the evidence given with such earnestness and force by Dr. Tyler Smith. His letter in the *Times* at once arrested public attention, and compelled authorities to listen. We may state that, from the moment of its appearance, the Home Secretary was in constant communication with him; and it was on his final statement, given in the *Times*, that there was nothing in the symptoms of Isabella Bankes incompatible with Smethurst's innocence, that the reprieve was decided upon. In a trial in which, we regret to say, the spirit of partisanship, and the instinct of man-hunting have been so very apparent, it must be at least satisfactory to our distinguished associate, that his instincts and his advocacy have been on the side of justice and mercy.

As there is a very general opinion that Smethurst did the deed, although the evidence was totally insufficient to convict him, we may, perhaps, be permitted to state that this opinion seems to be founded on the alleged fact that no fewer than three medical men, without communicating to each other their suspicions, came to the conclusion that Miss Bankes was being poisoned; and on the statement of the judge, made in his charge, that "no answer had been given to the main point of the prosecution, that no medicine whatever had the slightest effect upon the malady under which the deceased was suffering." With respect to the first statement, we think the shorthand evidence clearly proves that the medical men did communicate their suspicions to each other. It is far from our purpose to say that these gentlemen have, in total disregard of their oaths, told untruths; but there are a hundred modes of communicating suspicions without the use of words, and, we may add, quite unconsciously to the persons themselves—an expression of face would be sufficient. Indeed, we may say that, in our opinion, it would be very difficult to conceal a suspicion of this kind—in manner, at least, it would betray itself. That Dr. Julius did lead Dr. Bird to suspect poisoning, we may infer from the following passage in the evidence of the latter:—

"Mr. Serjeant Parry. *Q.* Did you ever form that opinion" (of slow poisoning by arsenic) "before Dr. Julius suggested it to you? *A.* I did not. He first suggested it to me, and then I agreed with him."

Here it is clear that, as far as slow poisoning by arsenic was concerned, Dr. Julius did communicate his suspicions to his partner. And can we conceive Dr. Todd coming down to this mysterious case without extracting some opinion from the physician in attendance? The only thing which puzzles us here, however, is to reconcile Dr. Todd's belief that he was treating a person who was being slowly poisoned, with the fact that he ordered her copper pills! This prescription would seem to imply that he thought she was suffering under dysentery. If he suspected poison, why did he order that which would only add fuel to the fire? Our own impression is, that there was a vague understanding between all of the medical men in attendance, which did not take a definite shape until Dr. Taylor gave his opinion; and then, to their retrospective eyes, all was clear.

With regard to the judge's extraordinary statement, we can only say, that there is nothing more common than for dysentery to run its course in defiance of all the skill of all the doctors in the world.

LAW AND PHYSIC.

A court of law is an entertaining, and, to a philosophical observer, an instructive scene. It is as amusing to watch the process, as it is instructive to become acquainted with the results, of a winnowing-machine that affects to deal only with relevant matter; yet, in point of fact, there are few congregations of civilised men where so much unnecessary jargon is permitted to have a hearing, as in a court of common law. Observe the judge during the examination in chief of a material witness—with what care his notes are taken: how accurate and orderly is the registration of the testimony. And now observe the judge during the cross-examination of the same witness: he leans back in his chair; his pen is dropped; his organ of intellectual appetite is evidently satisfied, and all that remains for him is to chew the cud of sweet and bitter patience until the next witness is called. No one knows better than the learned gentleman on the bench (for he has been an advocate himself) that the volley of sarcastic dust which the counsel is throwing in the eyes of the jury during the cross-examination is simply *nihil ad rem*, and has as much to do with the case in hand as with a trial in the courts of the planet Jupiter.

There are many things connected with law proceedings that are sound, if taken in a *juridical* sense, which are altogether obstructive of the ends of justice when taken in a *constitutional* sense; and among them are the legal methods of settling certain questions of lunacy. What can be easier than for a voluble and unscrupulous advocate so to work on the credulity of twelve ignorant men, by giving his own biassed interpretation of the medical evidence, as to twist their verdict into a virtual condemnation of the medical witness?

We profess to hold in the greatest veneration and respect whatever is of antiquity and substantial foundation in the statute-book of the realm. We reverence trial by jury as among the most valuable of our English privileges; but, while we esteem and hold up this institution within its just limits, we are bound to remind our legal friends that trial by jury, as it now exists in England, is not the *magnum opus* of Magna Charta; it does not resemble that fixed code of the Medes and Persians that admitted of no emendation. Juries have, we believe, since their creation, undergone the rough treatment of no fewer than fifty Acts of Parliament; in fact, they have been modelled from time to time, to suit the special purposes for which they were wanted. It is, therefore, monstrous to suppose their organisation to be so perfect as never to require repair; and we assert that the time is now come when, if the medical profession is to receive justice at the hands of the English law, the pleadings in the cause of the insane must be submitted to the jurisdiction of a body more capable of weighing their merits than that which is composed of twelve untrained John Bulls led by a crafty barrister. The truth is, such pleadings are generally of a very delicate, not to say abstruse character; and demand, on the part of those who are empowered to decide on them, something more than mere legal knowledge. The principle of trial by jury we fully admit to be the right one in this case; but we would have a jury for such a purpose to contain a large share of the scientific element. When a committee is appointed to inquire into the effects of coal-gas on the pictures of the National Gallery, we find it composed of scientific chemists, engineers, and artists. Are the temporal interests of a madman, and the fame of his medical adviser, of less value in the eyes of the legislature than the safety of a work of art?

Our earnest endeavour, then, is to make this a *constitutional* question, and to rouse the members of the senate to a consideration of the peculiar intricacies of the subject. Let them banish from their minds all foregone opinions, and exercise their primitive right to govern the doctrines as well as the acts of the courts of law. We fear that, of late years, too much has been yielded in the opposite direction; and that the public interest has suffered from the popular conclusion that lawyers should frame the laws, and the legislative assembly confirm them; whereas, confessedly, the most efficient measures and rules to protect society would be devised by those who have no professional bias, no preconceived notions, and no innate jealousies, to interfere with the exercise of their judgment.

Before quitting this subject, we have one word to offer on the relative powers of mind which lawyers and doctors bring to bear on the investigation of scientific truths. And here we disclaim all intention of drawing an invidious picture of the two professions respectively: our object is rather to point out the circumstances that have hitherto tended to frustrate the healthy cooperation of the energies that are displayed on both sides, than to insist on the intrinsic excellencies of either.

It is well known that the lawyer throughout his career, from the beginning of his legal existence in the Inns of Court to his final resting-place on the woolsack, is at every stage submitted to the ordeal of a discipline that tends to make him the exponent of a positive philosophy. Demonstrable truth is the grand end and aim of his professional work; and, although the validity of the means, when brought into action, must depend upon the accuracy of the scientific induction, and be tested by processes that are common to every description of inquiry, still, if we look into the direction which our later judicial proceedings are taking, we shall find, as an example of the modern contracting spirit, the law of evidence gradually becoming more restrictive; and the testimony which was formerly admitted on trials without question, such as hearsay evidence, now excluded, except in extreme cases. All this may be very advisable in ordinary instances; it may be very desirable in pure law, as in mathematics, so to narrow your vision as to have but one thing before you; but a wider field is required for those who seek to enrich science with new facts and the interpretation of general laws. The training of the scientific physician is not so much opposed to the severe educational course of the lawyer, as that something more is added to it. The medical man has to carry his reasoning faculties up into the higher departments of legitimate induction. The theory of probabilities, the elimination of chance, and the registration of empirical laws, are for ever forcing their importance upon his consideration in his dealings with the changing phenomena of disease; and that physician arrives at the truest conclusion in his practice who has the gift of bringing the largest number and variety of facts before him at a glance, and, by accurately observing the elements of the facts, of best determining what are the "middle results" of all.

If the principles of constitutional law and of scientific medicine can be made to walk hand in hand, and if the professors

of the latter art can be not only protected from the unjustifiable attacks sometimes made on them, but enabled to place their arguments before men capable of comprehending them, we feel confident that society generally will gain by the coalition. If, otherwise, physicians and scientific men are to continue to be exposed to the licentiousness of an irresponsible bar; if science is to be ridiculed, and facts sneered at, until they utterly fail of producing any more impression than the chattering of an idiot,—we may abandon all hope of immediate progress in forensic medicine.

THE WEEK.

The anticipated combination of the medical and surgical corporate bodies is beginning to be realised. This day's Journal contains two advertisements, in which it is announced that the Royal College of Physicians of Edinburgh has made arrangements with the College of Surgeons of that city, as well as with the Faculty of Physicians and Surgeons of Glasgow, for the purpose of holding, in conjunction with each of the latter bodies respectively, examinations of candidates for licenses to practise. The stated object of the joint examination is announced to be "to give to students facilities for obtaining from two separate bodies, and at less expense, a double qualification in medicine and surgery". Codes of regulations regarding professional and general education have been agreed on; and the first examination in general education will take place in a few weeks. We hope that it will not be long before we shall have to announce a combination of the London Colleges for the same purposes as those for which the Scotch corporations have entered into co-operation. It has been rumoured that the London College of Physicians has made the proposal, but that the College of Surgeons has received it with aught but favour. For the credit of the College of Surgeons, we trust that this rumour is without foundation, or, at all events, that it is only an exaggerated version of a temporary hesitation on the part of a body which finds it a hard task to shake off old and cherished prejudices.

If the account given by a correspondent of the *New York Times* be reliable, there would appear to have been a great dearth of proper medical attendance for the wounded during the late war in Lombardy. The writer states that on visiting the hospitals at Brescia, which contained the soldiers both of the French and the Austrian armies wounded at the battle of Solferino, he found that in several of them there was no French surgeon at all in attendance, and that a considerable number of the wounded were given up to Italian civil surgeons—men of good intentions, but who had never practised military surgery. In each hospital there were from one to five regular male nurses, an Italian *pharmacien* (who did nothing but give out the medicine and dressings), and a group of ladies in silk dresses and hoops, who did most of the nursing, both for French and Austrians. Purulent infection and hospital gangrene were noticed as occurring in several instances. The men of the various nationalities composing the Austrian army especially appeared in great distress, as it was next to impossible for them to meet with any one understanding their language, or able to divine their wants. The writer observes that no army surgeons in the world are superior, either in science or in administrative ability, to the surgeons of the French army; but, in his opinion, the wounded of Solferino were not well treated in any sense—neither in the mode of conveyance, nor the nursing, nor the surgical treatment. Most probably no calculation had been made for such an immense number of wounded. The deaths were said to be thirty daily in a total of ten thousand; and three-fourths of these must be attributed to the bad hygienic conditions surrounding the patients.

A correspondence has taken place between Mr. S. L. Rymer, Secretary to the Council of the College of Dentists, and the Secretary to the London Medical Registration Association, with regard to the propriety of the use of the term surgeon-dentist, by persons who are not members of a College of Surgeons. Mr. Rymer argues that the term "surgeon-dentist" is properly employed by dental practitioners, its meaning being simply "an operator on the teeth;" but he allows that if the title be employed to allure the public into supposing that the person assuming it is a surgeon, and it can be proved that the public have been so deceived, such a person is without doubt an offender against law. He says that the last clause of the Medical Act contains a provision which exempts dentists from its provisions in every instance; and he suggests that if there still remains any doubt, the matter should be tried in a court of law. The Committee of the Registration Association, in reply, state that they will contest the point at a convenient time. They further express their views on the matter referred to in Mr. Rymer's letter, summing them up in the following abstract:

"1. The word 'dentist' means 'an operator on the teeth;' 2. 'surgeon-dentist' implies that, in addition to the occupation of 'dentist,' the party has the statutory qualification of 'surgeon;' 3. It is penal to use the prefix 'surgeon' unless in possession of the legal qualification conferring such title."

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 1859.

Editor's Letter Box.

THE TREATMENT OF BOILS.

Letter from John Watson, M.D.

Sir,—I notice in the current week's Journal Dr. Durrant's remarks on the treatment of boils. As you did me the favour to print a paper on the subject about a twelvemonth ago, I will not repeat what was there stated; my views being in many respects at variance with Dr. Durrant's.

I wish merely to direct attention again to the value of large doses of nitric acid in this troublesome complaint, allowing at the same time *a full meat diet.* During the present summer, I have treated three adults, giving two drachms daily of the dilute acid in four doses; and in each the disease aborted:—that is to say, no fresh ones made their appearance, and the urine gradually lost its previously anæmic character.

I am, etc., John Watson.

Southampton, September 5th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Davey, J. G., M.D., Northwoods, Bristol, on Sept. 4.

Mudd, W. H., Esq., Surgeon, New Cross, on August 30.

*Pollard, Wm., jun., Esq., Torquay, on September 1.

Shillitoe, B., Esq., Surgeon, 34, Finsbury Sq., on Aug. 30.

Of daughters, the wives of—

Birkett, Edmund Ll., M.D., 48, Russell Square, on Sept. 2.

Lumsden, C. G. G., Esq., Assistant-Surgeon 90th Regiment, Punjaub, on June 30th.

MARRIAGES.

Brown, John, M.D., Bengal Army, to Katherine Stewart, second surviving daughter of the late Rev. G. A. Simpson, of Fyvie, Aberdeenshire, on September 1st.

Cave, Charles Daniel, Esq., of Clarehill, Gloucestershire, to Edith Harriet, eldest daughter of *J. A. Symonds, M.D., Clifton, on September 1st.

Gordon, Charles, M.D., to Frances Anne, eldest daughter of the Rev. Charles A. Austin, British Chaplain at Pernambuco, on August 9th.

Haverfield, Captain J. T., to Louisa, daughter of J. R. Handyside, M.D., of St. Petersburgh, at Derby, on Aug. 23.

Lallemand, George E., Esq., eldest son of *F. F. Lallemand, Esq., Surgeon, of Macclesfield, to Emilie H. B., youngest daughter of the late Wm. Haver, Esq., at Great Holland, Essex, on August 24th.

Marsh, Alfred, Esq., of Stamford Hill, to Emma, eldest daughter of J. A. Ransome, Esq., Surgeon, Manchester, on August 25.

Matthews, the Rev. T. R., of Gonville and Caius College, to Margaret Mary, elder daughter of *John N. Thompson, Esq., Surgeon, Nottingham, on August 25th.

*Mitchell, T. R., Esq., Liverpool, to Emma, daughter of John Roberts, Esq., Manningham, on August 31.

Smithes, John T., Esq., to Eleanor F. J., second daughter of F. Cobb, M.D., Milbridge, Surrey, at Oporto, on Aug. 23.

DEATHS.

Anderson, Alexander, M.D., New Hampton, on Sept. 6th.

Cheek, George N., Esq., Bengal Medical Service, at Conoor, aged 65, on July 3rd.

Dobson, William C., Esq., Surgeon, of Highbury, aged 30, on August 28th.

Gillespie, Alex., M.D., at Edinburgh, aged 83, on Sept. 1.

Granger. On August 23rd, at Exeter, Elizabeth, wife of Frederick Granger, M.D.

Henderson. On August 30th, at Bridge of Allan, N.B., Capt. Wm. Henderson, Bengal Engineers, son of Wm. Henderson, M.D., Aberdeen.

Latham. On August 30th, at Greenford, aged 2, Percy, son of R. G. Latham, M.D.

Pritchard. On August 25th, at Stratford-on-Avon, aged 84, Mary, wife of James Pritchard, Esq., Surgeon.

Simpson, John, Esq., Surgeon R.N., at Haslar, aged 39, on August 28th.

Smith. On September 3, at Hadham, Herts, aged 5 months, Rose Charlotte, daughter of *F. M. Smith, M.D.

Solly. On July 24th, at Cawnpore, Lieutenant Wm. H. Solly, 2nd Bengal Light Infantry, eldest son of Samuel Solly, Esq., Surgeon, London.

Wheeler. On August 30th, aged 21, Louisa J., youngest daughter of C. W. Wheeler, M.D., Shirley Lodge, Hants.

Whipple, Frederick J., Esq., Surgeon R.N., at Compton, Devon, on August 28th.

APPOINTMENTS.

*Walker, Thomas J., M.B., appointed Assistant-Physician to the Queen's Hospital, Birmingham.

PASS LISTS.

Royal College of Physicians of London. The following Extra-Licentiates were admitted members, under the new bye-laws, at the Comitia Majora, held on Sept. 7th:—

Bradshaw, Wm. W., Reading
Cooper, Thomas H., Slough
Evans, Oliver, Marine Hospital, Woolwich
Johnson, Henry, M.D., Shrewsbury
Neale, Melville, Sandhurst
Ogden, James, Manchester
Porter, John H., Cheltenham
Scott, Robert J., Plymouth
Thurnam, Jno., M.D., Devizes
White, Fredk. B., Backwell, Somerset
Williams, Caleb, M.D., York

At the same Comitia, the following Graduates in Medicine were admitted members under the temporary bye-laws:—

Alexander, W., M.D., Halifax
Anderson, Wm. A., M.D., Hillingdon
Banks, J. T., M.D., Crawley
Begley, W. C., M.D., Hanwell
Biggs, James S., M.D., Surrey County Asylum
Bright, James R. D. P., M.D., Cambridge Square
Broughton, Hugh H., M.D., Preston
Chadwick, Chas., M.D., Leeds
Coates, Charles, M.D., Bath
Collingwood, C., M.B., Liverpool
Drake, Aug., M.B., Exeter
Evanson, R. T., M.D., Torquay
Gee, Robert, M.D., Liverpool
Gibb, G. D., M.D., Portman St.
Greenwood, H., M.D., Blackheath
Guy, Thomas, M.D., Rochester
Hake, T. G., M.D., Spring Gns.
Halford, G. B., M.D., Pimlico
Hardinge, H., M.D., Sackville Street
Harley, G., M.D., Harley St.
Harrison, Jas. B., M.D., Manchester
Haward, E., M.D., Harley St.
Heaton, J. D., M.D., Leeds
Hawkins, J. V., M.D., King's Lynn
Heslop, T. P., M.D., Birming.
Hobson, Benjamin, M.B.
Hooper, J. M.D., Hoddesdon
Inman, Thos., M.D., Liverpool
Jones, C., M.D., Manchester Sq.
Jones, J., M.D., Woburn Place
King, Henry S., M.B., Lower Grosvenor Street
Kingsley, G. H., M.D., Bridgewater House
Kingsley, H., M.D., Stratford-on-Avon
Lewis, Waller A., M.B., General Post Office
Lucas, T. P., M.D., Brecon
McEwen, W., M.D., Chester
McWilliam, J. O., M.D., Trinity Square
Mitchelson, G. F., M.D., Kensington Gardens
Norton, R., M.D., Bayswater
Noyes, Henry G., M.D., Lee
Ogle, Wm., M.B., St. George's Hospital
Paley, Wm., M.D., Halifax
Palmer, Edw., M.D., Lincoln
Pickering, J., M.D., Winchester
Powell, R. H., M.D., Wyndham Place
Priestley, William O., M.D., Somerset Street
Ramsay, W. F. R., M.D., Somerset Street
Richardson, Chr. Th., M.B., Hinde Street
Robertson, C. A. L., M.B., Hayward's Heath
Sherlock, J., M.D., Worcester County Asylum
Stilwell, Geo. J., M.D., Hillingdon
Stookes, Alex. R., M.D., Liverpool
Sykes, John, M.D., Doncaster
Travis, Nath. A., M.D., Nice
Tuke, Th. H., M.D., Chiswick
Tyacke, N., M.D., Chichester
Waters, J., M.D., Bedford Sq.
Williams, Ph. H., M.D., Worcester
Withecombe, J. R., M.D., Grosvenor Street
Wright, John J., M.D., Malton

UNIVERSITY OF LONDON. M.B. First Examination, 1859. Examination for Honours.

Anatomy and Physiology.

FAGGE, C. H. (Exhibition and Gold Medal), Guy's Hospital
BASTIAN, H. Charlton (Gold Medal), University College
BUSZARD, Frank, Guy's Hospital } Equal.
SMITH, William John, University College }
GEE, Samuel Jones, University College
HUXLEY, James Usher, King's College
EVANS, Alfred Wm. Armour, Guy's Hospital } Equal.
HOLLAND, Edmund, University College }
GRABHAM, Charles, St. Thomas's Hospital
BANKART, James, Guy's Hospital
JEAFFRESON, Horace, St. Bartholomew's Hospital

Chemistry.

FAGGE, C. H. (Exhibition and Gold Medal), Guy's Hospital } Equal.
GEE, S. Jones (ditto), University College }
SMITH, William John, University College
BUSZARD, Frank, Guy's Hospital
BANKART, James, Guy's Hospital } Equal.
HUXLEY, James Usher, King's College }
GRABHAM, Charles, St. Thomas's Hospital
JEAFFRESON, Horace, St. Bartholomew's Hospital
HOLLAND, Edmund, University College
GALTON, John Henry, Guy's Hospital
WATTS, Robert, Bengal Medical College, and University College

Materia Medica and Pharmaceutical Chemistry.

FAGGE, C. H. (Exhibition and Gold Medal), Guy's Hospital
SMITH, Wm. John (Gold Medal), University College
BUSZARD, Frank, Guy's Hospital
BANKART, James, Guy's Hospital
HUXLEY, James Usher, King's College
HOLLAND, Edmund, University College
GALTON, John Henry, Guy's Hospital

Botany.

FAGGE, Charles Hilton (Gold Medal), Guy's Hospital
HUXLEY, James Usher, King's College

UNIVERSITY OF EDINBURGH. On August 1st, the annual ceremony of graduation took place, under the presidency of Professor Kelland, the office of Principal being vacant. The following is a list of the graduates. Those to whose names three asterisks are prefixed, obtained prizes for their dissertations; those who have two asterisks prefixed, were deemed worthy of competing for the prizes; and those to whose names one asterisk is prefixed, were commended for the dissertations.

Scotland.

BELL, Joseph
BELL, William
***BROWN, John
*DEWAR, James Alexander
DODS, George
DOIG, Charles David
DOUGLAS, William
FARIE, Robert
FERGUSON, James
*HILL, George
HORNE, John
JOHNSTON, James
*JOHNSTON, John Wilson
JOHNSTON, William
*INGLIS, Andrew
*LETHBRIDGE, Tyndall
LORIMER, William
**MACLAGAN, David Philip
*MCGOWN, Thos. Cochrane
MILLER, James
*MOIR, Robert
MUNRO, James
ORR, John Henry
PICARD, Peter Kirkpatrick
***RORIE, James
ROY, William
SCLANDERS, Alexander
*SHEARER, George
**SOMERVILLE, Robert
TRAILL, William
TULLOCH, James Tulloch
TURNBULL, William

From England.

*AINSLIE, Thomas Alex.
ALSTON, William Evelyn
*BREE, Charles Robert
*DUKE, Allen Abraham
FAWSSETT, Frederick
*FAYRER, Joseph
GARRINGTON, Arthur M.
HORNIBLOW, Wm. Robert
INMAN, William
**MOORE, John Daniel
NORMAN, John
PEARSE, Arthur
SAVILE, Robert
*SISSON, Richard Samuel
TURNBULL, Alexander

From Ireland.

LITTLE, Samuel
RUTHERFORD, David John
WILLIS, William

From India.

GRANT, James George G.
MADDEN, Charles Wm. C.

From Jamaica.

ANDERSON, Izett William
*DIGNUM, Henry Graham
*STEWART, John Edmonstoune

From Nova Scotia.

GOSSIP, Charles John
MITCHELL, Robert

From Australia.

WILLIAMSON, George

From the Mauritius.

*POUGNET, François Voley

From Sierra Leone.

*HORTON, James Africanus B.

After the capping, Professor Goodsir delivered an address on the present relations of medicine to physiological science. The subject of Dr. John Brown's prize dissertation was "Notes on the Surgery of the Indian Campaign of 1857-8"; and of Dr. Rorie's, "The Anatomy of the Sympathetic System of Nerves".

HEALTH OF LONDON—SEPTEMBER 3RD, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... { Boys .. 878 / Girls .. 833 }	1711	.. 1047
Average of corresponding weeks 1849-58..	1437	.. 1123

Among the causes of death were—diarrhœa, 156; cholera, 5; small-pox, 27; measles, 15; scarlatina, 15; diphtheria, 13; croup, 3; whooping-cough, 15; fever, 49; consumption, 129; accidents, 25. Forty persons died at 80 and upwards; and 201 children under one year.

Barometer:
Highest (Sun.) 29.831; lowest (Tu.) 29.435; mean 29.600 in.

Thermometer:
In sun—highest (Mon.) 94°; lowest (Fri.) 74.8°.
In shade—highest (Mon.) 76.9°; lowest (Wed.) 46.5°.
Mean—57.5°; difference from mean of 43 yrs.—1.5°.
Range—during week, 30.4°; mean daily, 18.8°.
Mean humidity of air (*saturation*=100), 72.
Mean direction of wind, S.W.—Rain in inches, 0.33.

INFLUENCE OF THE RIVER EMANATIONS ON HEALTH. Dr. McWilliam, in his Report on the health of the waterguard and waterside officers of Her Majesty's Customs during 1858, makes the following remarks:—My duties of medical inspector led me to watch closely for any unfavourable influence, which the condition of the river might exert upon the health of the waterguard and waterside officers under my charge. The former, in number upwards of 800, may be said to live on the river, or in the docks, in ships, or in barges, and open boats; and the latter, numbering upwards of 500, are employed during the day in the docks, or at the various wharves of the bonded warehouses on each bank of the river. The total number placed on the sick list from all causes during the four hot months of the past year, although slightly in excess of those sick at the same period in 1855 and 1856, was below the average of three previous years, and considerably lower than in the year immediately preceding (1857), when the river and docks were also offensive, but in a degree immeasurably less than in the past year. Then as respects bowel affections, in which I include diarrhœa, choleraic diarrhœa, dysentery, etc., the types of those forms of disease, which in this country, noxious exhalations are commonly supposed to originate, we find the additions during the four hot months of the past year from this class of complaints 26·3 below the average of the corresponding period of the three previous years, and 73 less than those of 1857. The number daily sick was also below the average, although there were several cases of rheumatism, phthisis, and other disorders on the list during nearly the entire year. * * * In my Quarterly Report to the Board for April, May, and June last, I guarded myself against committal to the opinion that the then state of the river would always continue innocuous. I observed "that the river, by a continuance of high temperature, *might* become morbific I do not presume to deny. I only assert that it has not as yet acquired that property." (Report, July 1st, 1858.) The succeeding three months, however, passed away, with only an insignificant amount of diarrhœa cases, and the general health of the departments continued in every respect favourable. From the authorities at the St. Katherine Docks, the London Docks, the East and West India Docks, the Regent's Canal Dock, the Victoria Docks, and the Surrey and the Commercial Docks, I

was very readily furnished with information regarding the health of the officers, clerks, labourers, etc., in these docks respectively. These documents will be found in the Appendix; and it will be seen that the numbers absent by sickness in the London Docks, the St. Katherine's, and the East and West India Docks during the past summer were less than in the same season of the previous year. According to the reports of the Registrar General, 1858 was an unhealthy year; but the mortality in spring and summer was below the average, the excess of deaths having taken place in the six cold months. From the same authority we learn that diarrhœa and summer cholera were, in London, "perceptibly less fatal than usual." In the summer quarter of 1857 the deaths from the former of those complaints were 2,343, and from the latter, 177; while the respective numbers of the quarter ending September 30th, 1858, were 1,391, and 90. While, then, it is not only admitted, but urged, that miasms and foul emanations, from whatever source arising, call for the immediate employment of every means of prevention or mitigation which science and art can suggest, and that the legislative and other investigations into the condition of the Thames during the last summer were fully demanded by the occasion, it is nowhere sustained by evidence that the stench from the river or docks, however noisome, was in any way productive of disease. On the contrary, there was less disease of that form to which foul emanations are supposed to give rise than usual. I am quite assured that, had cholera in an epidemic form, appeared in London during last summer, the cause and effect relation of the stench of the river, and the advent of that disorder, would have been considered as firmly and triumphantly established, not only by the majority of the public, but also by not a few of the medical profession; indeed, the death of a Thames waterman in June, said to have been from Asiatic cholera, was very generally ascribed to river poisoning, and was announced as the signal of an impending outbreak of that dreaded scourge; but had the river been capable of inducing cholera, it is surely not a little extraordinary that among some hundreds of thousands living in its immediate neighbourhood, one man only should have suffered from this disorder. It is opposed to all analogy, and to the usual order of nature, and therefore entirely unphilosophical to suppose that a cause so extensively diffused, should have been so singularly limited in its effect.

Sick Soldiers. The annexed circular memorandum, addressed to officers commanding regiments and depôts on home stations, has been issued:—

"Horse Guards, S.W., Aug. 31.

"In consequence of the numerous claims from private practitioners for medical attendance upon soldiers labouring under chronic diseases, who are employed on the recruiting service and other duties away from their regiments, the General Commanding-in-Chief desires that every soldier shall be subjected to a careful medical examination on the day before or on the day on which he leaves his regiment or depôt for detached duty of any kind. His Royal Highness likewise desires that, before granting sick furloughs, commanding officers will obtain from medical officers a distinct opinion as to whether the cases are likely to be benefited by the removal of the patients to another locality; and further, that they will take steps for ascertaining that the men's friends are in a situation to afford them such aid as the nature of their ailments may require. Much needless suffering must result if soldiers labouring under chronic diseases are allowed to visit friends who are unable to provide them with the necessary accommodation and comfort. "By Command,

"W. F. Forster, *Deputy Adjutant-General.*"

Statistics of Lunacy. The recently issued Report of the Commissioners in Lunacy gives the following statistics. In 1858, 4,985 lunatics (2,413 males, and 2,572 females) were admitted into county and borough asylums, while 2,614 were discharged (1,965 recovered). On New Year's Day last there remained on hand 15,842 lunatics, of whom 1,673 were deemed curable; 11 were found lunatic by inquisition, 326 were criminals, and 1,354 were chargeable to counties or boroughs. 1,858 lunatics remained in hospitals on the 1st of January, 1859; 904 were admitted, and 607 discharged (341 recovered) last year. In the metropolitan licensed houses there were 2,551 lunatics on hand last New Year's Day (331 deemed curable, 132 found lunatic, and 36 criminals). 119 only were chargeable to the public. 1,287 were private, and 1,264 pauper lunatics. In the provincial houses 2,523 lunatics remained on the 1st of January last, of whom 179 were chargeable (413 only deemed curable). Thus, there were altogether 22,774 lunatics in durance on the 1st of January, 1859 (+137 in the naval hospitals), and of these 2,773 were deemed curable. 300 were lunatics by inquisition, 682 were criminals, and 1,652 chargeable to counties or boroughs. 4,889 of the 22,911 were private, and 18,022 pauper patients.

The Yellow Fever at Lisbon. The municipality of Lisbon have had above two hundred silver medals struck, for the purpose of honouring the acts of devotion and charity manifested during the prevalence of yellow fever in that capital in 1857. They are to be distributed among those persons whose services were most eminent during the epidemic. On one face of the medal is an allegorical upright figure, symbolising the town of Lisbon; and on the other side is the legend, "To humane devotion", surrounded by a crown of oak. A diploma or certificate will accompany each medal. Pensions, not exceeding 200,000 *reis* (about £58), are also to be granted to medical men, priests, and other persons, who, after having distinguished themselves in the epidemics of 1853 and 1857, have become incapacitated from continuing their profession.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Dr. Jas. Russell; Mr. Edw. Lister; Mr. T. W. Crosse; Mr. Wm. Martin; Dr. Lionel Beale; Mr. C. J. Evans; Dr. Tilt; Dr. Tylor; Dr. Hyde Salter; Dr. Markham; Dr. P. H. Williams; Dr. William Camps; Dr. E. L. Ormerod; Dr. R. H. Taylor; Mr. T. Holmes; Dr. Leet; Dr. F. J. Brown; Dr. J. Watson; Mr. I. Harrinson; The Secretary of the New Sydenham Society; Mr. Wm. Copney; Mr. James Reid; and Mr. H. Terry, Jun.

BOOKS RECEIVED.

1. De l'Alcool, et des Composés Alcooliques en Chirurgie, de leur influence sur la réunion immédiate et sur les accidents graves ou mortels des plaies et des opérations (phlegmons diffus, phlegmasies des synoviales tendineuses, infection purulente, etc.) Par M. J. F. Batailhé et M. Ad. Guillet. Paris: 1859.

ADVERTISEMENTS.

Grosvenor Place School of Medicine.

No. 1, GROSVENOR PLACE (adjoining St. George's Hospital).

WINTER SESSION 1859-60.

LECTURES.

The Introductory Lecture will be delivered on Monday, October 3rd, at Three o'Clock, p.m., by Dr. COCKLE.

General Anatomy and Physiology—Dr. Richardson.
Descriptive and Surgical Anatomy—Dr. Halford and Mr. Lawson.
Practical Anatomy—Mr. Pittard.
Chemistry—Dr. Thudichum.
Principles and Practice of Medicine—Dr. Cockle and Dr. Leared.
Principles and Practice of Surgery—Mr. Spencer Wells & Mr. Adams.

Fees. General Fee to all the Lectures required by the Universities of London and St. Andrew's, the Royal College of Surgeons of England, and the Society of Apothecaries, 35 Guineas.

Special Arrangements may be made for any one of the Examining Boards.

Prizes and Honorary Certificates will be awarded for general proficiency at the termination of the Session.

The Microscope is used to illustrate the Lectures and Demonstrations.

The Dissecting Room and Museum of Anatomy are open to the Students during daylight, where their Studies are superintended by the Lecturers on Anatomy and Mr. Pittard.

The Lecturer on Chemistry has a Private Laboratory, where Students are instructed in Analytical and Physiological Chemistry.

Instruction in Pathological Anatomy is given by the Lecturer on Physiology.

Further information may be obtained at the School, 1, Grosvenor Place; of Dr. Richardson, 12, Hinde Street, Manchester Square, W.; or at the Residences of the different Lecturers.

Now ready, price 5s. 6d., or free by post to any part of the United Kingdom, price 6s., Fourth Edition, greatly enlarged and improved,

A Grammatical Introduction to the

LONDON PHARMACOPŒIA, and a KEY to PHYSICIANS' PRESCRIPTIONS. By F. S. LEACH.

"This little work will be found extremely useful to students who have received but an imperfect classical education."—*The Lancet.*

HUGHES and BUTLER, Medical Booksellers and Publishers, 15, St. Martin's-le-Grand.

St. Bartholomew's Hospital and

MEDICAL COLLEGE.—The WINTER SESSION will COMMENCE on October 3rd, with an INTRODUCTORY ADDRESS by Mr. HOLDEN, at Seven o'Clock P.M.

LECTURES.

MEDICINE—Dr. BURROWS and Dr. BALY.
SURGERY—Mr. LAWRENCE.
DESCRIPTIVE ANATOMY—Mr. SKEY and Mr. HOLDEN.
PHYSIOLOGY AND GENERAL ANATOMY—Mr. SAVORY.
CHEMISTRY—Dr. FRANKLAND.
SUPERINTENDENCE OF DISSECTIONS—Mr. CALLENDER and Mr. SMITH.

SUMMER SESSION, 1860, Commencing May 1.

MATERIA MEDICA—Dr. F. FARRE.
BOTANY—Dr. KIRKES.
FORENSIC MEDICINE—Dr. BLACK.
MIDWIFERY, etc.—Dr. WEST.
COMPARATIVE ANATOMY—Mr. M'WHINNIE.
PRACTICAL CHEMISTRY—Dr. FRANKLAND.

HOSPITAL PRACTICE.—The Hospital contains 650 Beds, and relief is afforded to more than 90,000 Patients annually. The In-Patients are visited daily by the Physicians and Surgeons, and Clinical Lectures are delivered—On the Medical Cases, by Dr. Burrows and Dr. Farre; on the Surgical Cases, by Mr. Lawrence, Mr. Stanley, Mr. Lloyd, and Mr. Skey. The Out-patients are attended daily by the Assistant-Physicians and Assistant-Surgeons.

COLLEGIATE ESTABLISHMENT.—Students can reside within the Hospital Walls, subject to the rules of the collegiate system, established under the direction of the Treasurer and a Committee of Governors of the Hospital. Some of the Teachers and other Gentlemen connected with the Hospital also receive Students to reside with them.

SCHOLARSHIPS, PRIZES, ETC.—At the end of the Winter Session, examination will be held for two Scholarships of the value of £45, for the year. The Examination for Prizes and Certificates of Merit will take place at the end of the Winter and Summer Sessions.

Further information may be obtained from Mr. Paget, Mr. Holden, or any of the Medical or Surgical Officers or Lecturers; or at the Anatomical Museum or Library.

St. George's Hospital Medical School.

SESSION 1859-60.—The WINTER COURSE of INSTRUCTION will commence on SATURDAY, October 1st, with an INTRODUCTORY ADDRESS by Mr. H. C. JOHNSON, at 2 p.m., at the Hospital.

Physicians—Dr. Page, Dr. Bence Jones, F.R.S., Dr. Pitman, and Dr. Fuller.
Assistant-Physicians—Dr. Barclay and Dr. John W. Ogle.
Obstetric Physician—Dr. Robert Lee, F.R.S.
Surgeons—Mr. Cæsar Hawkins, F.R.S., Mr. Cutler, Mr. Tatum, and Mr. H. C. Johnson.
Assistant-Surgeons—Mr. Prescott Hewett and Mr. George D. Pollock.
Dentist—Mr. Vasey.

Lecturers—Medicine—Dr. Pitman.
" Surgery—Mr. Tatum.
" Anatomy—Mr. Pollock and Mr. Gray.
" Physiology—Mr. A. Johnson.
" Chymistry—Dr. H. M. Noad.

The Hospital contains 350 beds.

Clinical Lectures are given by the Physicians and Surgeons of the Hospital during the Winter and Summer Sessions, and Clinical Instruction is given in the Wards by the Physicians and Surgeons, and on the Diseases peculiar to women by the Obstetric Physician.

A Maternity Department, for the delivery of married lying-in women at their own homes, is established at the Hospital, under the superintendence of the Obstetric Physician.

The Surgeons' Perpetual Pupils are eligible to be Assistant House-Surgeon for Six Months, and House-Surgeon for Twelve Months (without additional Fee), when properly qualified for the Office. Pupils of the Hospital are eligible to the office of Obstetric-Assistant, when duly qualified, at a salary of £100 per annum.

Pupils entering to St. George's Hospital Medical School are free to all Lectures and Hospital Practice necessary for the Examination of the College of Surgeons and Society of Apothecaries, by the payment of FORTY GUINEAS the first year, FORTY GUINEAS the second year, and TWELVE GUINEAS the third year. But Pupils have the option of entering to the different courses of Lectures and Hospital Practice by separate payments.

EXHIBITIONS AND PRIZES.

"The William Brown Exhibition," of Forty Pounds per Annum, tenable for Three Years, may be held by any Pupil, perpetual to the Medical or Surgical Practice, who has commenced his third, but not completed his fourth Winter Session. Pupils entering to the Hospital Medical School in the Session 1859-60 will be entitled to compete for this Exhibition.

A Prize of Twenty Guineas, for general proficiency in Medical Studies, will be offered to Students who enter to the Hospital Medical School for the Session 1859-60. The Examination will take place in July.

Also, for the encouragement of Clinical Study—

A Prize of Twenty Guineas, for Surgeons' Pupils in their second year; a Prize of Twenty Guineas, for Physicians' Pupils in their second year; Sir Benjamin Brodie's Clinical Prize in Surgery; the Thompson Medal; the Lewis Powell Clinical Prize in Medicine; and Sir Charles Clarke's Prize for Good Conduct.

Further information may be obtained from Mr. Pollock, the Treasurer of the School; from any of the Lecturers; or from Mr. Hammerton, the Apothecary of the Hospital.

St. Mary's Hospital Medical School.

—The WINTER SESSION will commence on Monday, October 3, at Eight o'clock, P.M., with an Introductory Address by Mr. URE.

It is a distinctive characteristic of St. Mary's Hospital that the following Medical Appointments are annually conferred upon the Pupils free of every expense. The advantages of Five of these Appointments far exceed in money value as many SCHOLARSHIPS of Fifty Pounds each. There are four Resident Medical Officers, who board (free of all expense) in the Hospital, three of whom are appointed for twelve months; and one (the Obstetric Officer), who is appointed for six months; four Non-Resident Medical Officers; a Medical and a Surgical Registrar; all of whom are appointed by the Weekly Board of Governors on the recommendation of the Medical Committee. Clinical Clerks and Dressers are selected from the best qualified Students. All the above offices are awarded after competition, among the qualified Perpetual Pupils of the Hospital.

Physicians—Drs. Alderson, Chambers, Sibson, H. Jones, Sieveking, and Markham.
Surgeons—Messrs. Coulson, Lane, Ure, Spencer Smith, Walton, and J. Lane.
Physician-Accoucheur—Dr. Tyler Smith.
Ophthalmic Surgeon—Mr. White Cooper.
Aural Surgeon—Mr. Toynbee.

Further information may be obtained on application to the Dean of the School, who will also furnish the names of Gentlemen in practice in the vicinity of the Hospital willing to receive pupils to reside with them.

SPENCER SMITH, Dean of the School.

St. Mary's Hospital, August 1859.

Guy's Hospital. — The Medical

SESSION commences in OCTOBER. The Introductory Address will be given by Dr. HABERSHON, on Saturday, the 1st of October, at Two o'clock.

MEDICAL OFFICERS.

Physicians—Thomas Addison, M.D., G. H. Barlow, M.D., Owen Rees, M.D., F.R.S., W. W. Gull, M.D.
Assistant Physicians—S. O. Habershon, M.D., S. Wilks, M.D., F. W. Pavy, M.D.
Surgeons—Edward Cock, Esq., John Hilton, Esq., F.R.S., John Birkett, Esq.
Assistant Surgeons—Alfred Poland, Esq., Cooper Forster, Esq., T. Bryant, Esq.
Obstetric Physician—Henry Oldham, M.D.
Assistant Obstetric Physician—Braxton Hicks, M.D.
Surgeon Dentists—T. Bell, Esq., F.R.S., J. Salter, Esq.
Surgeon of the Eye Infirmary—John F. France, Esq.

LECTURERS—WINTER SESSION.

Medicine—Owen Rees, M.D., F.R.S., W. W. Gull, M.D.
Surgery—John Hilton, Esq., F.R.S., John Birkett, Esq.
Anatomy—Alfred Poland, Esq., Cooper Forster, Esq.
Physiology—F. W. Pavy, M.D.
Chemistry—Alfred Taylor, M.D., F.R.S.
Demonstrations on Anatomy—Mr. Durham and Mr. Moxon.
Experimental Philosophy—Mr. Durham.

Gentlemen desirous of becoming students must give satisfactory testimony as to their education and conduct. They are required to pay £40 for the first year, £40 for the second year, and £10 for every succeeding year of attendance, or £100 in one payment entitles a student to a perpetual ticket.

Dressers, Clinical Clerks, Ward Clerks, Obstetric Residents, and Dressers in the Eye Wards, are selected according to merit from those students who have attended a second year. A Resident House Surgeon is appointed every six months from those students who have obtained the College Diploma.

Six Scholarships, varying in value from £25 to £40 each, will be awarded at the close of each Summer Session for general proficiency.

Two Gold Medals will be given by the Treasurer—one for Medicine and one for Surgery.

A Voluntary Examination will take place at entrance in Elementary Classics and Mathematics. The first three candidates will receive, respectively, £25, £20, £15.

Mr. STOCKER, Apothecary to Guy's Hospital, will enter students and give any further information required.

Guy's Hospital, July 1859.

London Hospital Medical and Sur-

GICAL COLLEGE, Mile End. 1859-60.—The next WINTER SESSION will commence on Monday, October 3rd, 1859, when the Introductory Lecture will be delivered by Mr. CRITCHETT, at Three p.m.

Nicholas Parker, M.D.—Medicine
Thos. Blizard Curling, F.R.S. } Surgery
George Critchett }
John Adams—Descriptive and Surgical Anatomy
Andrew Clark, M.D. { Physiology and General and Morbid Anatomy
{ Practical Histology
John Sharman } Practical Anatomy
John Cooper }
Henry Letheby, M.B.Lond.—Chemistry; Practical Chemistry
H. J. Barrett—Anatomy and Pathology of the Teeth, and Dental Surgery
F. H. Ramsbotham, M.D.—Midwifery and Diseases of Women & Children
F. H. Ramsbotham, M.D. } Forensic Medicine
Henry Letheby, M.B.Lond. }
Herbert Davies, M.D.—Materia Medica and General Therapeutics
George Critchett—Ophthalmic Surgery
Robert Bentley, F.L.S.—Botany
J. Langdon H. Down, M.B.—Comparative Anatomy

General Fee for attendance on the Medical and Surgical Practice, qualifying for the examination at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the Lectures, 84 guineas, payable in two instalments of 42 guineas each, at the commencement of the two first winter sessions of attendance.

Perpetual Fee to the Lectures alone, £50.

Students can make special entries to Lectures or Hospital Practice.

Further particulars and prospectuses can be had on application to Dr. PARKER, Hon. Secretary, 22, Finsbury Square, E.C.; or at the College.